

THE PROGRESS OF EDUCATION IN FREE INDIA

[With Special Reference to National Policy on Education]

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PREFACE TO THE FIRST EDITION

The post-independence era has witnessed a tremendous expansion, both qualitative and quantitative, at all levels of the educational ladder. From time to time many Commissions and Committees have studied the various aspects of education and given valuable suggestions for further improvement in the 'Excellence' system. The nation is determined to reach the 'Peaks of educational and all possible attempts are being made to achieve this end. The present volume gives a detailed account of all the efforts that the nation is making to implement the recommendations of the expert bodies. Its subject-matter is primarily based on the publications of the Central and State-Governments, reports of the Commissions and Committees, Seminars, Study Circles and Workshops. Editorial comments of the leading newspapers and educational journals have also been given due attention to make the book as latest and comprehensive as possible.

The book, it is hoped, will not only be useful to students preparing for their professional examinations but also to general readers who are interested in education.

The author extends his thanks to all the authors and publishers whose books he has consulted and quoted.

J.C. AGGARWAL

PREFACE TO THE FIFTH EDITION

It gives me immense pleasure to place in the hands of the readers the Fifth Edition of the book. Three new chapters namely National Commissions on Teachers (1983—85), The National Policy on Education, 1986 and the Programme of Action for Educational Reforms have been added.

It is hoped that the revised edition will not only satisfy the requirements of syllabi of different universities but also provide useful reading material to teachers, educational planners and administrators.

Suggestions for further enhancing the value of the book will be gratefully received and attended to.

J.C. AGGARWAL

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A Brief Historical Survey of Education in India

SECTION I ANCIENT INDIA

"Education is no exotic in India. There is no country where the love of learning had so early an origin or has exercised so lasting and powerful an influence."

F. W. THOMAS

"At no period of its history has India been an altogether unenlightened country. Inscriptions, on stone and copper, the palm-leaf records of the temples, and in later days, the wide-spread manufacture of paper, all alike indicate not only the great knowledge, but also the common use of the art of writing. From the earliest times the caste of Brahmans has preserved by oral tradition as well as in MSS. ; a literature unrivalled alike in its antiquity and in intellectual subtlety of its contents."

LORD MESTON

Notable Features of Education in Ancient India

1. **Free and Accessible.** Education was free and accessible to all (except to Shudras) who sought it.
2. **Education-No State Control.** Rulers of the country had nothing directly to do with education. It was a private affair of the people, managed entirely by Brahmans. Rulers of the country could subsidise it, if they thought fit to do so, with grants of land or money,

but could impose no conditions or control on teachers, affecting their freedom of work.

3. High Status of Teachers. Teachers were a highly honoured class—honoured even by kings. Kings rose from their thrones to receive great teachers, such as Narada, Vashishtha and Vishwamitra. A well-known sanskrit verse goes so far as to say : The teacher is Brahma. The teacher is Vishnu. The teacher is the Great God Shiva. The teacher is the Great Brahman (Supreme Divine Soul) incarnate. Bow to that teacher !

4. Teachers as Parents. Teachers behaved as parents to their pupils and pupils behaved as members of the teachers' family.

The attitude of the pupil was to be one of complete submission.

5. Residential Schools. Teachers and pupils lived together and so identified themselves with one mother as to be able to pray as follows :

"May both of us be guarded ! May both of us be protected ! May both of us work together ! May the study of both of us be successful (vibrant with power, radiant with light) ! May we not be rivals to each other ! Om, Peace, Peace, Peace."

6. Aim of Education-Self-Realisation. The ultimate aim of education in ancient India was not knowledge as preparation for life in this world or for life beyond, but for complete realisation of self—for liberation of the soul from fetters of life, both present and future. That knowledge was real, which led to emancipation—सा विज्ञा या विमुक्तये—led from unreality to reality, from darkness to light, from death to immortality.

7. Immediate Aim—Vocational. The immediate aim of education, however, was to prepare the different castes of people for their actual needs of life.

8. Curriculum. The subjects of instruction varied according to the vocational needs of the different castes from the vedas and vedangas in the case of Brahmans, to the art of warfare in the case of Kshatriyas, and to agriculture and trade, arts and crafts in the case of Vaishyas.

9. Method of Instruction. The method of instruction generally consisted in recitation by the teachers and repetition by the pupil, followed by explanation by the teacher, questioning by the pupil, and discussion between the teacher and the pupil.

10. Individual Teaching. Pupils were taught, individually, not ~~use~~ by the class method. Where pupils were many, the monitorial was followed, the more advanced pupils being appointed to the less advanced.

11. Method of Study. The method of study consisted in listen-

ing to the teacher, reflection on what had been listened to, and its constant repetition (revision).

12. Role of Travel in Education. Travel was regarded as necessary to give a finishing touch to education.

13. Education—Moral, Religious and Spiritual. Education was for education's sake, not for a public examination or for paid public or private service, as it is generally considered to be at present. It was not merely intellectual. It was also moral, religious, and spiritual.

14. Forests as Centres of Education. The place of education was generally the forest "far from the madding crowd's ignoble strife".

15. Sanskrit as the Medium of Institution. The medium of Instruction in institutions conducted by Brahmins was Sanskrit.

16. Self-Control and Self-Discipline. There was, generally, no corporal punishment. Self-control or self-discipline was considered to be the best discipline.

17. Wide-Spread Education of Women. In the earlier Vedic and Upanishad times, girls were free to go through the Upanayana ceremony, wear the sacred thread, live, a life of celibacy, studied vedas, vedangas and other subjects along with their brother pupils.

Education During the Vedic Period. (Up to about 1000 B.C., When most of the Vedic literature was composed.) Every person, male or female, was required to undergo the discipline of *Brahmacharya* when one was initiated into the sacred literature. The beginning of education was marked by a ritual called *Upanayana*; it was considered a second or spiritual birth. Great stress was laid on the individual's capacity to memorise, recite and explain the religious hymns, on creative intellect, on debating power and on developing a spirit of enquiry. Since education was not yet so complex in most early sciences it was the father who used to educate his children. The education system produced youths and maidens properly grounded in religious literature, strong in intellect and efficient in their family profession.

Education During the Upanishad—Shutra Period (c.1200 B.C. to 200 B.C.) With the extensiveness of Vedic literature, complexity of rituals and the growth of new branches of learning, the professional teacher became a special feature. Students in a small number were required to live with the teacher at his own house as the members of his own family under a system of rules and regulations governing their life and studied for a period of twelve years. No fee was charged. The students were, however, required to help the teacher in his household and farm work in his spare time. Correct memorisation and proper pronunciation was emphasised. Much attention was

paid to female education and women scholars like Maitreyi and Gargi and a regular class of women teachers appeared during the first half of this period. Female education, however, received, a setback by 500 B.C., one of the factors being the gradual lowering of marriage age. It was laid down that every householder during the monsoon period should devote to the recapitulation of his past learning. Profession education on a hereditary basis was carried on. This was a creative epoch characterised by the development of metaphysics, medicine, metallurgy and of philosophic and political philology, grammar, astronomy, mathematics, medicine, metallurgy and of philosophic and political thought.

Education During the Dharmashastra Period (200 B.C. to 500 A.D.). A systematic discussion of the aims and methods of education was available. It not only encouraged religious and philosophic studies for other worldly goals, but also helped one to earn his living and become a responsible citizen. The 'gurukula' system of a large number of students living under the superintendence of a teacher was in vogue. Rules of discipline stressed daily prayers, proper courtesy, good habits and manners, celibacy, plain-living and high thinking. Students were required to live by begging which engendered a sense of humility and gratitude to society. There was monitorial system, brilliant students in charge of junior classes. Memorisation, recitation and recapitulation formed an important part of daily routine and aphoristic forms were used to aid to memory. Dialogue and discussion methods were used for the complete unravelling of the subject matter, when doubts were raised and properly answered. No new lesson was taught until the old one was mastered and every student progressed at his own rate. The age was of critical reflection and rational outlook. Specialisation in different branches had started and values of new discoveries were realised.

Education During the Puranic Period (500 A.D. to 1200 A.D.) The rise of the corporate institutions for higher studies is most noteworthy. Buddhist monasteries developed into universites, some of international fame like Nalanda and Vikramashila. Hindu temple colleges were started in South India at about 8th century. There was a new educational atmosphere in these corporate institutions with scores of teachers and hundreds of students living together and studying diverse subjects, the course being fixed by governing bodies. It helped the cause of higher education and produced many great scholars and authors. Specialisation, however, began to be carried too far. A reverence for the past became so deep that new learning was accepted or rejected on the basis of canonical literature or orthodox theories. The spirit of enquiry, creative thinking and a free open mind were now at a discount. The revival of classical Sanskrit gave an intellectual unity and scholars expressed their thought in Sanskrit only. Sanskrit, however, gradually ceased to be intelligible to the masses owing to the emergence of different provincial vernaculars at about 1000 A.D.

Buddhist Education in Ancient India. There was no funda-

mental difference between Hindu and Buddhist education regarding its theory and practice. In the beginning Buddhist education was purely monastic, confined to those who entered the Order, but after some time it was extended to the whole community. Buddhist education centred round monasteries as Vedic education centred round the sacrifice. There were two ordinations for entering the Order. Prabbajia, the preparatory ordination at the age of 8, and Upasampada, the final ordination at the age of 20. Buddhist monasteries developed into corporate educational institutions, and some like Nalanda, Valabhi and Vikramshila became international centres of learning. The doors of these institutions were thrown open to all, irrespective of any considerations of caste or country and though organised by Buddhist, their outlook remained non-sectarian.

Women Education (before 200 B.C.) Women were eligible for the study of the performance of sacrifices. *Upanayana*, the Vedic initiation of girls had been as common as that of boys. There were women scholars who remained unmarried for a long time devoting themselves to higher studies. It is said that Rigvedic collection contains hymns composed by different poetesses. Maitreyi was deeply interested in the problems of philosophy and Gargi was a great dialectician and philosopher of religion and philosophy. Many of the women made teaching their profession. There were boarding houses for girl students probably under the superintendence of women teachers. Several ladies in Buddhist families used to lead a life of celibacy in pursuit of religion and philosophy.

Science Education in Ancient India. It goes back to the Indus Valley Civilisation, about 5 thousand years ago, when people were familiar with mining and metal-work, simple architecture, manufacturing of gypsum cement and permanent paints. Vedic science included the element of astronomy, mathematics, chemistry and biology. At the time of the Buddha (5th century B.C.) the universe was classified by the elements which were atomic. It was believed that all atoms (*anu*) were identical, eternal and had no qualities but potentialities. The *Vaisheshika* school specially elaborated atomic doctrines based not so much on experiment as on logic and intuition. India made real experiments and discoveries in the field of sound and musical systems. Iron Pillar of Delhi is a tribute to the ancient knowledge of metallurgy. Chemistry was used for making a large number medicines and drugs to promote longevity. All this knowledge was codified in numerous Sanskrit works.

Commercial Education in Ancient India. The idea of the scope and nature of commercial education can be had from Manu and Kautilya. Knowledge of commercial geography, the needs of the people of various localities, exchange value and quality of articles, and languages spoken at different trade centres were considered necessary. Theory of banking was also included in the course. In the hereditary training families of high status, such a wide training

might have been possible, but generally the knowledge about commerce and trade was picked up by working in the family shops or trades. There were no organised educational institutions, though most of the trades had formed efficient guilds during the first millennium of the Christian era. Training was usually imparted in the family by the elders in real learning situations.

Mathematics Education in Ancient India. Ancient India quite early evolved a simple system of geometry urged by the necessity of accurately laying the open-air sacrificial places. Shulva-shutra are the oldest mathematical works, probably composed between 400 B.C. and 200 A.D. Aryabhata (476—520) is the first great name in Indian mathematics. To the period immediately preceding him belongs one of the most significant of human discoveries, the zero, though the name of the discoverer is unknown. Medieval Indian mathematicians, such as Brahmagupta (7th century), Mahavira (9th century) and Bhaskara (12th century) made important mathematical discoveries which were not known to Europe until the Renaissance. They knew the importance of positive and negative quantities and rules of extracting square and cube roots. They could solve quadratic and indeterminate equations. Aryabhata's determination of the value of pi (π) as $\frac{62832}{20000}$ i.e., 3.1416 was much more accurate than that of the Greeks.

Shiksha. [Derived from the root word 'shiksha', lit., to give] knowledge of the correct pronunciation and recitation of the Vedic texts ; education. In the Vedic age, *Shiksha* was one of the six subsidiary studies which helped the proper study of the Rigveda. Sayana defined it as the science of the pronunciation of letters, accents and the like. Through the knowledge of *Shiksha*, ancient dialectical differences created by the freedom of a spoken language were preserved and a start was given to the scientific study of the language. Education in the Vedic period consisted of learning to recite the holy texts, and the duty of the guru was to give the *Veda* to his pupil by uttering it. In modern usage, the word *shiksha* means education, learning or study ; and *shikshak* means a teacher.

Brahmacharya. The first of the four stages into which the life of the individual was divided, the period of adolescence when one as a student, called the *brahmachari*, led a celibate and austere life at the home of his teacher mastering the *Vedas* or part of them. see 'studentship in the Athrvada and ashrama',)

Studentship in the Atharva-veda. The *Atharva-veda* is the only *Veda* describing the system of studentship and exalting the system of *Brahmacharya*. The pupil was initiated into the stage of studentship through the performance of a ceremony called *Upanayana* by his *acharya* (teacher) who imparts to him a new birth, a spiritual birth, so that the pupil emerges as a *dvija* (twice-born) or as a *brahmachari* (one who adopts the vow of the Vedic studies). The *brahmachari*

had to undergo physical discipline of wearing *kusa* girdle and deer skin letting his hair grow, collecting fuel and tending fire, and begging and spiritual discipline of worshipping fire, practising austerities, controlling the senses, living a dedicated life and satisfying *acharya* by gifts. He prayed for the success in his study of the *Veda*, for faith, wisdom, insight, longevity and immortality. Girls could also accept *Brahmacharya* and pursue a life of studentship undergoing both physical and spiritual discipline.

Acharya (teacher). The word is defined by Manu as one who initiates a pupil and teaches him the *Vedas* and the *Upanishads*. In Brahmanical education, during the *Shutra* period, a normal type of an educational institution was represented by an *acharya* along with his pupils who lived at his own house as a member of his family under the discipline of rules governing their life and studies for a period of 12 years. the *acharya*, however, did not accept any fees and he ranked higher than the *upadhyaya*. In Buddhist education, the residential school was represented by an *upadhyaya* or *acharya* who was responsible for the studies, health, manners, morals and spiritual progress of a group of young monks or *bhikkus* who lived under his guardianship. In the Buddhist system the *upadhyaya* ranked higher than the *acharya*.

Upadhyaya : The word is defined by Manu as one who initiates a pupil and teaches only a portion of the *Vedas* or the *Vedic Angas*, for a fee or for his livelihood. Generally, he provided only supplementary instructions to pupils temporarily admitted, and he is lower in the hierarchy than an *acharya*. In Buddhist education, an *upadhyaya* held a rank higher than that of an *acharya* and was responsible for the studies, health, morals and spiritual progress of a group of young monks.

Upanayana : [lit., introduction of the pupil] a ritual or ceremony performed for a formal and regular introduction of a pupil to *brahmacharya*, the student life. It marked the beginning of the Vedic education for which some age between 8 and 12 was regarded suitable. The defaulters of *Upanayana* suffered complete social boycott. It implied the society's concern to make education universal and compulsory among the first three castes—Brahmans, Kshatriyas and Vaishyas—who were collectively called '*Dvijas*' meaning 'twice-born', as they were believed to get a second birth, a spiritual one through *Upanayana*. The student properly dressed and wearing the *yajnapavita*, the sacred thread, was committed to the charge of the gods with prayers, after which he was made to stand on stone as a symbol of steadfastness at study. Thereafter, the formal acceptance of the pupil was made.

Nalanda : An institution of higher learning, situated near the present Patna in Bihar where scholars from all parts of India and from distant countries like East Indies, Turkistan, Mongolia, China, Korea and Tibet came to study. By the 2nd century it was already a well established educational centre. It is said that the number of inmates

curriculum and gave a wholehearted protection to Hindu learning. Aurangzeb tried earnestly to diffuse Islamic learning though he cared very little for Hindu learning. On the break-up of Moghul Empire education suffered grievously.

Aims of Muslim Education. The chief aim of education was to obtain knowledge of the Islamic religion. In connection with all mosques of importance there are small schools either for the education of the children or for the training of students of divinity. The child who attends such a school is first taught his alphabet and is then made to write down simple words taken from the Qur'an and then helped to learn the chapters of the Qur'an. Amongst students of divinity, called talibe-ilm 'seekers after knowledge', the usual course of study includes grammatical inflection, syntax, logic, arithmetic, algebra, rhetoric and versification, jurisprudence, theology, commentaries on the Qur'an and rules of interpretation of laws of Islam. Students in the mosques are generally supported by the people of the locality and sometimes the mosques are endowed with land or rents of shops and houses for the payment of teachers.

Maktab is School for imparting Islamic education. Maktab is derived from Arabic word 'kutub' (writing), and means a place where writing is taught, or a place of books. It is generally attached to a mosque. During the Muslim period it was run with the help of well-to-do Muslims or with land or money grants from the rulers. The students begin by studying Urdu, Persian or Arabic. After being able to read the Arabic script, the students recite Suras or chapters of the Qur'an. Memorisation and correct pronunciation are emphasised. Special attention is paid to good handwriting. Arithmetic, conversation, correspondence, poetry, and good manners are included in the curriculum. Gulistan or Bostan of Sadi are generally prescribed for the purpose of moral education.

SECTION III

EDUCATION IN INDIA DURING THE BRITISH PERIOD

1. Charter Act of 1813 as the Foundation Stone of British Educational System in India. This is an Act of the East India Company that for the first time made an annual provision for a sum of not less than one lac of rupees for the promotion of learning. Clause 43 of the Act reads : "It shall be lawful for the Governor-General-in-Council to direct that out of any surplus which may remain of the rents, revenues, and profits arising from the said

territorial acquisitions, after defraying the expense of the military, civil, and commercial establishment and paying the interest of the debt in manner hereinafter provided, a sum of not less than one lac of rupees in each year shall be set apart and applied to the revival and improvement of literature and the encouragement of the learned natives of India and for the introduction and promotion of a knowledge of the sciences among the inhabitants of the British territories in India." This clause is regarded as the foundation stone of English educational system in India as it was admitted by the British Parliament for the first time that 'education in India had a claim on public revenues'.

2. Oriental-Occidental Controversy. The controversy that continued during the period 1823-1839 among the officials of the East India Company regarding the methods to be adopted for the intellectual improvement of the people of India, necessitated by the provision of at least one lac of rupees every year in the Charter Act of 1813. The parties to the controversies were the 'Orientalists' or 'Classicalists' and 'Occidentalists' or 'Anglicists'. The former were in favour of educating the upper classes of the Indian people through the medium of their classical languages and the latter through the medium of English. Lord William Bentinck's proclamation (1835) approved of Macaulay's Minute and directed that funds would be utilised for popularising English literature and science through the medium of the English language.

3. Macaulay's Minute. The famous minute of Lord Macaulay, the first Law Member of the Governor General's Executive Council, submitted in 1835 opened a new chapter in the educational history of India. He advocated the education of the upper classes and made a vigorous plea for spreading western learning through the medium of English. Lord Macaulay thought that it was possible through English education to bring about a class of persons Indian in blood and colour but English in tastes, in opinions, in morals and in intellect.

4. Bentinck's Proclamation : This was resolution order dated March 7, 1835 of Lord William Bentinck consequent to the acceptance of Macaulay's Minute. It reads : "His Lordship in Council is of the opinion that the greater object of the British Government ought to be the promotion of European literature and sciences among the natives of India, and that all the funds appropriated for the purpose of education would be best employed on English education alone."

This was the first declaration of the British Government in the field of education in India. It eventually determined the aim, content and the medium of instruction in India. Promotion of western sciences and art was acknowledged as the avowed object.

Schools teaching European literature and science became popular because of the great interest shown in English education by

5. **Auckland's Minute.** This is a minute of November 24, 1829 written by Lord Auckland, the Governor-General of India. In this minute Lord Auckland after studying the causes of the dispute between the 'Orientalists' and the 'Occidentalists' tried to satisfy both the parties and outlined the future policy of the Government : (i) Existing Oriental colleges may continue and receive the same grant as they were receiving previous to Bentinck's Minute ; (ii) Existing Oriental colleges may start English classes if they so desired ; (iii) One-fourth of the students of these colleges may receive scholarships ; (iv) Books of instruction in Oriental languages may be published out of funds sanctioned for Oriental education.

6. **Wood's Despatch.** The despatch was issued in 1854 by Sir Charles Wood (afterwards Lord Halifax), the President of the Board of Control in India, in which he declared 'the education that we desire to see extended in India is that which has for its object the diffusion of the improved arts, science, philosophy and literature of Europe, in short of European knowledge'. The Despatch suggested the creation of the Department of Public Instruction, in each province, under the charge of an officer designated as the Director of Public Instruction. The Despatch recommended the institution of universities in the Presidency towns (Calcutta, Madras and Bombay). In the words of Lord Dalhousie, Despatch contained "a scheme of education for all India, far wider and more comprehensive than the Local or the Supreme Government could have ever ventured to suggest".

7. **Indian Education Commission (1882) or the Hunter Commission.** The Commission was appointed in 1882 by Lord Curzon under the Chairmanship of William Hunter to enquire particularly into the manner in which effect had been given to the principles of the Despatch of 1854 and to suggest measures for carrying out the policy as laid down therein. The Commission reiterated the principles which had already been accepted years ago in Wood's Despatch. Among the major recommendations of the Commission were : (1) strenuous efforts to be made in the sphere of elementary education ; (2) control of primary education to be made over to District and Municipal Boards ; (3) indigenous schools to be encouraged ; (4) local funds to be utilised mainly for primary education ; (5) at least one model high school to be established in some districts where people may not be able to establish schools for themselves with grant-in-aid ; (6) missionary enterprise to occupy only a secondary place in Indian education. The Commission failed to see the financial implications of its recommendations. However, the historical value of this document is incalculable. It is also known as Hunter Commission.

During the period 1882—1902, there was a considerable expansion in the field of secondary education.

8. The University Commission of 1902. The Commission was appointed by Lord Curzon in 1902 'to inquire into the conditions and prospects of the universities established in India ; to consider and report upon any proposals which have been or may be made for improving their constitution and working ; and to recommend to the Governor-General-in-Council such measures as may tend to elevate standard of university teaching, and to promote the advancement of learning'. Among the important recommendations of the Commission were : (i) New Universities should not be established ; (ii) Existing Universities should be reorganised as teaching bodies ; (iii) The Senate and Syndicate should be recognised ; (iv) The territorial jurisdiction of each university should be precisely defined ; (v) Rules of affiliation should be strict and affiliated colleges should be strictly supervised ; (vi) There should be a managing committee for every college ; (vii) Hostel should be built for students.

9. Resolution of the Government on Education (1904). The educational policy was declared in the form of a government resolution on 11th March 1904 by Lord Curzon. Regarding recognition of secondary schools it stated, "Whether these schools are managed by public authority or by private persons, and whether they received aid from public funds or not, the Government is bound in the interests of the community to see that the education provided in them is sound. It must, for example, satisfy itself in each case that a secondary school is usually wanted, that its financial stability is assured, that its managing body where there is one, is properly constituted, that it teaches the proper subjects up to a proper standard, that due provision has been made for the instruction, health, recreation, and discipline of the pupils, that the teachers are suitable as regards character, number and qualifications, and that the fees to be paid will not involve such competition with any existing schools as will be unfair and injurious to the interests of education. Such are the conditions upon which alone schools should be eligible to receive grant-in-aid or to send up pupils to compete for, or receive pupils in enjoyment of Government scholarships, and schools complying with them will be ranked as recognised schools ? These conditions were soon incorporated in the provincial code of grant-in-aid.

10. Gokhale's Resolution in the Imperial Legislative Council on Primary Education (1911). The Bill was introduced in the Imperial Legislative Council on 16th March 1911 by Gopal Krishna Gokhale, a member of the Council, 'to provide for the gradual introduction of the principle of compulsion into the elementary education of the country'. On March 17, 1912, the Bill was rejected by 38 votes to 13. A year earlier Gokhale had moved a Resolution in the Council 'that a beginning should be made in the direction of making elementary education free and compulsory throughout the country, and that a mixed commission of officials and non-officials be appointed at an early date to frame definite proposals. Gokhale, however, withdrew the Resolution on receiving an assurance from the Government that

the question would be considered. But seeing the indifference of the Government, Gokhale had to introduce this Bill.

11. Resolution of the Government of Indian on Education (1913) The Resolution advocated three cardinal principles of educational policy—(1) Instead of increasing the number of existing institutions their standard should be raised; (2) The curricula of primary and secondary schools should be made more practical and useful; (3) Facilities of higher studies and research should be provided in India so that Indian students may not have to go abroad.

12. Calcutta University Commission (1917-1919) The Commission was appointed by the Government of India in 1917 under the chairmanship of Dr. Michael Sadler, the Vice-Chancellor of the University of Leeds, ‘to enquire into the conditions and prospects of the University of Calcutta and to consider the question of a constructive policy in relation to the question it represents’. Among the Indian Members of the Commission were Sir Asutosh Mukerji and Dr. Zia-Uddin Ahmed. The major recommendations were (i) Three-year degree course, (ii) Establishment of a Board of Secondary and Intermediate Examination in each province, (iii) less rigid control over Universities, (iv) Appointment of staff by special Selection Committees, (v) Safeguard of interest of Muslim students.

The Report of the Commission became a constant source of suggestion and information. It greatly influenced the subsequent course of secondary and higher education in the country.

13. National Movement in Education (1905-1921). The movement demanded national education which became more pressing with the growth of the national movement during the early part of the 20th century. Indian leaders began to condemn the official system in vogue and demanded Indianisation of education. In Bengal a Society for the Promotion of National Education was formed under the chairmanship of Guru Das Banerji. Rabindranath Tagore, Rashbehari Ghosh and Aurobindo Ghosh also took up the cause of national education. Swami Shraddhanand established a Gurukul at Hardwar. The main emphasis of the educational movement was on (1) Indian control of education; (2) Indian ideals of education; (3) Reverence for the motherland; (4) Growth of Indian languages; and (5) Development of technical and national education.

14. Education under Provincial Autonomy (1937-1947). The Government of India Act 1935, divided all educational activities into two categories—Federal (or Central) and State (or Provincial). (A) Federal Subjects included (i) the Imperial Library, Calcutta ; the Indian museum, Calcutta ; the Imperial War Museum, the Victoria Memorial, Calcutta; and any similar institutions controlled or financed by the Federation; (ii) The Banaras Hindu University and the Aligarh Muslim University; (iii) Preservation of ancient and historical monuments; (iv) Education in the defence forces; (v) Archaeology; and (vi)

Education in Centrally Administered Areas. (B) State subjects included all matters regarding education other than those which had been included in the Federal List and were regarded as State or Provincial Subjects.

15. Hartog Committee (1928). The Committee was appointed by the Simon Commission in 1928 under the chairmanship of Sir Philip Hartog to review the position of education in India. It regretted the slow progress of literacy and a high percentage of failure at the Matriculation Examination which dominated the secondary education. It recommended that there should be more diversified curricula in the schools and a large number of pupils intending to follow certain avocations should stop at the middle school stage.

16. Education under Dyarchy (1921-37). Education was treated as a transferred subject under a dyarchical system of government in the provinces of India, introduced in 1921 as a result of the Government of India Act, 1919 passed by the British Parliament. Subjects of administration were divided into two categories *i.e.*, Reserved and Transferred Subjects. The reserved subjects were put under the Governor and his executive council and the transferred subjects under the ministers who were responsible to the Provincial Legislative. Education was made transferred subject and the development of education was the responsibility of the Minister for Education. Finance was a reserved subject with the result that the Education Minister had to face many difficulties. Moreover, the Education Minister had no control over the I.E.S. officers whose services were controlled by the Secretary of the State for India.

17. Abbot Wood Report (1937). The Report was submitted in 1937 by the two expert advisers—A. Abbot, Ex-Chief Inspector of Technical Schools, Board of Education, England and S. H. Wood, Director of Intelligence, Board of Education, England—invited by the Government of India in 1936 on the recommendation of the Central Advisory Board of Education to advise ‘whether any vocational or practical training should be imparted in primary, secondary and higher secondary schools, and if so, what should be its nature and extent’. The report consisted of two parts : (i) Report on Vocational Education written by Mr. A. Abbot, and (ii) Report on General Education written by Mr. S. H. Wood. The report stressed that vocational education was as important as general education. “Neither of them can claim to be more useful and necessary. If general education brings about the development of the non-material culture of a country, vocational education does the same thing for material culture. Hence, both are necessary for the progress of country.”

18. Report of the Wardha Education Committee (1937). Discussed in detail in the Subsequent chapters.

19. Kher Committee Report (1940) The Report of the Committee

appointed in 1938 by the Central Advisory Board of Education under the Chairmanship of Shri B. G. Kher, the then Premier of Bombay, to consider Zakir Husain Committee's report in conjunction with the Wood-Abbot Report. Important conclusions of the committee were (1) Scheme of Basic Education to be first introduced in rural areas; (2) Training of teachers to be reorganised; (3) Salary to be not less than Rs. 20 p. m.; (4) English not to be introduced in Basic Schools; (5) Pre-basic schools to be introduced; (6) Basic education to be for 8 years i.e., 6 to 14 years.

20. Report on the Post-War Educational Development in India (1944). The report is popularly known as Sargent Report after Sir John Sargent the then Educational Adviser to the Government of India. The Reconstruction Committee of the Governor-General's Executive Council asked the Central Advisory Board of Education to prepare a plan for the educational development to be taken up after the termination of war. The Board entrusted this work to Sir John Sargent. The memorandum which he submitted to the Board in 1944 is variously known as Scheme of Post-War Educational Development in India, Sargent Report, or Sargent Scheme. The Plan aimed at reorganising the system of education in India. The plan was to be carried out in 8 stages by means of eight five-year plans. The plan provided for free, compulsory and universal basic education for all children between the ages of 6 and 14.

SECTION IV

PLANS ON EDUCATION IN FREE INDIA

(Discussed in detail in subsequent Chapters)

Plans for education form a part of the Five-Year National Plans. Each plan is drawn up for a period of 5 years by various agencies at district, as well as State level, and finally co-ordinated by the Ministry of Education before it is modified and approved by the Planning Commission. The Planning Commission was founded in 1950 followed by the First, Second and Third Plans covering the periods 1951-56, 1956-61 and 1961-66 respectively. The Fourth Five-Year Plan for the period 1969-74 succeeds the three annual plans for 1966-67, 1967-68, and 1968-69. It is gradually being recognised that education is not just a consumption or welfare activity something that can be postponed in preference to investment on irrigation, power, or industries; it plays an important role in the economic development of a country.

Financial Provision for Education and Training in the Plans

(Rs. in crores)

1st Plan 2nd Plan 3rd Plan
1951-56 1956-61 1961-66

	1. General education (including Cultural Programmes)	133	208	418
	2. Technical education	20	48	142
	3. Vocational training	—	13	49
	4. Medical education	22	36	57
	5. Agricultural education	5	11	20
	6. Other Ministries	22	42	79
		—	—	—
	(i) Total Education and Training	202	358	765
	(ii) Total Plan Provision	1960	4600	7500
	(iii) Percentage on education	10·3	7·8	10·2

First Five-Year Plan on Education (1951-52 to 55-56). The main emphasis was on reorientation of the educational system and integration of its different stages ; expansion in various fields especially in the Basic and Social education ; improvements of the existing secondary and university education and the devising of a system of higher education suited to the needs of the rural area ; expansion of facilities for women's education ; training of teachers, especially women teachers and teachers for Basic schools, improvement in the pay scales and service conditions of teachers ; and assistance to backward States and backward sections of the population. The total outlay on education was Rs. 153 crores distributed as under : elementary education Rs. 85 crores ; secondary education Rs. 20 crores ; University Education Rs. 14 crores ; social education ; physical education, cultural programmes etc. Rs. 14 crores ; technical education Rs. 20 crores. The number of students in classes I to V increased from 191·5 lakhs (1950-51) to 251·7 lakhs (1955-56), in classes VI to VIII from 31·2 lakhs to 42·9 lakhs, in classes IX to XI from 12·6 lakhs to 19·8 lakhs and in University education from 3·1 lakhs to 5·5 lakhs. The proportion of children attending schools in the age group 6-11 increased from 43·1% to 50% ; in the age group 11-14 from 12·9% to 15·9% ; and in the age group 14-17 from 5·6% to 7·9%. In technical education, the admission capacity for diplomas and degrees increased from 5,900 to 10,480 and from 4,120 to 5,890 respectively. The number of school teachers increased from 7·50 lakhs (including 57% trained) in 1950-51 to 10·29 lakhs (including 61% trained) in 1955-56.

Second Five-Year Plan on Education. (1956-57 to 1960-61). The main emphasis was on : Basic education ; expansion of elementary education, diversification of secondary education, improvement of standards of college and university education, extension of facilities

for technical and vocational education and the implementation of social education and cultural development programmes. The total outlay on education was Rs. 256 crores distributed as under : elementary education Rs. 87 crores ; secondary education Rs. 48 crores ; university education Rs. 45 crores ; social education, physical education, cultural programmes etc., Rs. 28 crores ; technical education Rs. 48 crores. The number of students in classes I to V increased from 251.7 lakhs (1955-56) to 349.9 lakhs (1960-61), in classes VI to VIII from 42.9 lakhs to 67.1 lakhs, classes IX to XI from 19.8 lakhs to 30.2 lakhs, and in university education from 5.5 lakhs to 7.4 lakhs. The proportion of children attending schools in the age group 6-11 increased from 50% to 62.8%, in the age group 11-14 from 15.9% to 22.5%, and in the age group 14-17 from 7.9% to 11.1%. In technical education, the admission capacity for diplomas and degrees increased from 10,480 to 25,000 and from 5,890 to 13,820 respectively. The number of school teachers increased from 10.29 lakhs (61% trained) in 1955-56 to 13.83 lakhs (including 65% trained) in 1960-61.

Plan on Education, Third Five-Year : (1961-62 to 1965-66). The main emphasis was on : Provision of facilities for the education of all children in the age group 6-11 ; extension and improvement in teaching of science in secondary and university stages ; development of vocational and technical education at all levels ; expansion and improvement of facilities for the training of teachers for each stage of education ; increase in scholarships, freeships and other assistance ; special concentration on the education of girls ; orientation of all elementary schools to the Basic pattern, re-organisation of university education ; development of both skill and knowledge, a creative outlook, a feeling of national unity and an understanding of common interests and obligations, at all stages of education. The total outlay on education was Rs. 560 crores distributed as under : elementary education Rs. 209 crores ; secondary education Rs. 88 crores ; university education Rs. 82 crores ; social education, physical education, cultural education, etc., Rs. 39 crores ; technical education Rs. 142 crores. The number of students in classes I to V increased from 349.9 lakhs (1960-61) to 514.5 lakhs (1965-66), in classes VI to VIII from 67.1 lakhs to 105.4 lakhs, in classes IX to XI from 30.2 lakhs to 55.1 lakhs ; and in university education from 7.4 lakhs to 12.3 lakhs. The proportion of children attending schools in the age-group 6-11 increased from 62.8% to 78.5%, in the age-group 11-14 from 22.5% to 30.9%, and in the age group 14-17 from 11.1% to 18%. In technical education the admission capacity for diplomas and degrees increased from 25,000 to 49,900 and from 13,820 to 24,700 respectively. The number of school teachers increased from 13.83 lakhs (including 65% trained) in 1960-61 to 20.47 lakhs (including 74% trained) in 1967-68.

SECTION V

EXPANSION OF EDUCATION IN INDIA 1946-47 AND 1971-72

(Population in 1947 about 30 crores)
(Population in 1971 about 54 crores)

I. Enrolment in Classes I to VIII

Age Group	1946-1947	1970-71	1971-72
6-11 (Classes I to V)	About 141 lakhs or about 35% of the age group	About 605 lakhs or about 80% of the age group	630 lakhs or about 83% of the age group
11-14 (Classes VI to VII)	About 20 lakhs or about 9% of the age group	About 143 lakhs or about 35% of the age group	About 150 lakhs or about 37% of the age group

II. Enrolment in Classes VIII to XI

1946-47	1969-70
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About 8·3 lakhs	About 70 lakhs
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III. Educational Institutions at the School Stage

1946-47	1970-71
(a) Primary Schools	172,663
(b) Middle Schools	8,270
(c) High/Higher Secondary Schools	3,637

IV. University Enrolment

1946-47	1970-71
(a) Universities	19
(b) Enrolment	241,794

V. Literacy

Year	1941	1971
	12·2%	39·4%

Miscellaneous Educational Statistics 1970-71

Item	1970-71
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1. Percentage of Trained Teachers

(i) Primary Teachers	82·2
(ii) Middle School Teachers	79·4
(iii) High/Higher Secondary School Teachers	75·4

} 1969-70

2. Percentage of Trained Teachers	79·9	1969-70
3. Percentage of literacy (1971)		
Men	39·5	
Women	18·4	
Total	29·3	
4. Per Capita Expenditure on Education	Rs. 11·1	
5. The Highest Per Capita Expenditure on Education	Rs. 56·6 in Delhi	
6. The Lowest Per Capita Expenditure on Education	Rs. 5·8 in Bihar	
7. Percentage of Expenditure on Education of the State Income	2·6%	

Constitutional Provisions of Education in India

Historical Background : Education—a State Subject

Education Under Dyarchy (1921-37) : Education was treated as a transferred subject under a dyarchical system of government in the provinces of India, introduced in 1921 as a result of the Government of India Act, 1919 passed by the British Parliament. Subjects of administration were divided into two categories *i.e.*, Reserved and Transferred Subjects. The reserved subjects were put under the Governor and his executive council and the transferred subjects under the Ministers who were responsible to the Provincial Legislative. Education was made transferred subject and the development of education was the responsibility of the Minister for Education. Finance was a reserved subject with the result that the Education Minister had to face many difficulties. Moreover, the Education Minister had no control over the I.E.S. officers whose services were controlled by the Secretary of the State for India.

Education Under Provincial Autonomy (1937-47) : The Government of India Act, 1935 divided all educational activities into two categories—Federal (or Central) and State (or Provincial). (A) Federal Subjects included (i) the Imperial Library, Calcutta ; the Indian Museum, Calcutta ; the Imperial War Museum, the Victoria Memorial, Calcutta ; and any similar institution controlled or financed by the Federation; (ii) The Banaras Hindu University and the Aligarh Muslim University; (iii) Preservation of ancient and historical monuments; (iv) Education in the defence forces; (v) Archaeology; and (vi) Education in Centrally Administered Areas. (B) State subjects included all matters regarding education other than those which had been included in the Federal List and were regarded as State or Provincial Subjects.

Constitutional Bases of Education in free India

The most significant achievement of the free people of India

was to give a new Constitution to themselves. The Constitution of India—the charter of India's freedom—is a product—not of political revolution, but of the research and deliberations of eminent men. They assembled in the Constituent Assembly prepared a Draft after months of intensive labour ‘ransacking all the known constitutions of the world’, and after discussion adopted it on November 26, 1949. The Constitution came into force on January 26, 1950. As it embodies India's full self-expression and mirrors the hopes and aspirations of the people, it is but natural that education should find its own place in this great document.

The outlines of the social philosophy which should govern all our institutions, educational as well as others, are indicated in the Preamble to the Constitution. The Preamble proclaims the idealism and values which the Constitution seeks to establish and promote. It provides a conception of the social order for which we should educate our youths. Our educational system must find its guiding principles here, and must imbibe those ideas which are characteristically epitomised in words *Justice*, *Liberty*, *Equality* and *Fraternity*. These noble principles should inspire the life of all educational institutions and should mould their policies, programmes and practices.

The Preamble : We, *the People of India*, having solemnly resolved to constitute India into a Sovereign Democratic Republic and to secure to all its citizens :—

Justice : social, economic and political.

Liberty : of thought, expression, belief, faith and worship; equality of status and opportunity and to promote among them all.

Fraternity : assuring the dignity of the individual and the unity of the Nation. *In our Constituent Assembly* this twenty-sixth day of November 14, 1949, do hereby adopt, *enact* and *give to ourselves this Constitution*.

Education—A State Subject

Prima facie education is a State subject. Entry 11 of the List II (State List) of the Seventh Schedule to the Constitution lays down that “Education including universities, subject to the provisions of entries 63, 64, 65 and 66 of List I and entry 25 of List III should be a State subject.”

Distribution of Legislative Power

In every federal government, there is division of legislative power between the Centre and the Units. In India, too, the Constitution has divided the legislative powers between the Union and the States.

Generally speaking, there are two ways of dividing the powers

between the Federal Government and the State. The Federal Government may be given a number of specified powers and the rest may be vested in the States. This scheme is followed in the American and the Australian Constitutions. Secondly, the States may be given a number of specified powers and the rest of the legislative field may be left to the Centre. This scheme is followed in the Canadian Constitution.

In India, the division of legislative powers is more or less of the Canadian type. But there are some novel features of our Constitution in this matter. Our Constitution embodies three Legislative lists, namely, the Union List, the State List and the Concurrent List. As laid down by Article 246, Parliament has exclusive power to make laws in respect of the matters enumerated in the Union List. The Legislatures of the States have exclusive power to make laws for any part thereof with respect to any of the matters enumerated in the State List. In respect of matters enumerated in the Concurrent List, both Parliament and the Legislatures of the States have authority to legislate. For territories not included in the States, Parliament has authority to legislate on any matter whatsoever. The residual powers of legislation have been vested in the Centre, that is, in Parliament. In case of inconsistency between the laws made by Parliament and those made by the State Legislature, it is the former which will prevail and the State laws will, to the extent of the inconsistency, be void. It is provided that in respect of matters enumerated in the Concurrent List a law made by the Legislature of any State shall, in spite of its inconsistency with any earlier law made by Parliament, prevail, if the State law in question has been reserved for the consideration of the President and received his assent. Parliament can, however, at any time enact a law repealing or amending such a State law. Apart from these general provisions, the Constitution has also provided for the acquisition of power by Parliament to legislate on such matters in the State List as assume national importance and also for the voluntary surrender to the Centre by one or more States of any subject falling within their legislative ambit.

Union List (List I)

The Centre has the exclusive rights to enact legislation in respect of the 97 subjects. Among them following items connected with education are :

Entry 62 of the List. The institutions known at the commencement of this Constitution as the National Library, the Indian Museum, the Imperial War Museum, the Victoria Memorial and the Indian War Memorial and any other like institution financed by the Government of India wholly or in part and declared by Parliament by law to be an institution of national importance.

Entry 63 of the Union List—Institutions of National Importance. The institutions known at the commencement of this Constitution as

the Banaras Hindu University, the Aligarh Muslim University and the Delhi University and any other institution declared by Parliament by law to be an institution of national importance.

Entry 64—Institutions of Scientific and Technical Education
Financed by the Government of India wholly or in part and declared by Parliament by law to be institutions of national importance.

Entry 65 of the Union List. Union agencies and institutions for :

- (a) Professional, vocational or technical training, including the training of police officers ; or
- (b) the promotion of special studies or research ; or
- (c) scientific or technical assistance in the investigation of detection of crime.

Entry 66—Coordination of and Determination of Standards in institutions for higher education or research and scientific and technical institutions.

Educational and Cultural Relations with Foreign Countries.
Entry 13 of the Union List. Participation in international conferences, associations and other bodies and implementing of decisions made thereat.

Education in the Union Territories. Article 239 of the Constitution says, "Save as otherwise provided by Parliament by law, every Union territory shall be administered by the President acting, to such extent as he thinks fit, through an administrator to be appointed by him with such designation as he may specify." Naturally, therefore, education in the Union Territories comes under the purview of the Centre.

State List (List II)

It consists of 66 subjects.

Entry 11. Education including universities subject to the provisions of entries 63, 64, 65 and 66 of List I and entry 25 of List III.

Entry 12. Libraries, museums and other similar institutions controlled or financed by the State ; ancient and historical monuments and records other than those declared by or under law made by Parliament to be of national importance.

Concurrent List (List III)

This list comprises 47 items. Items related to education are as under :—

Entry 20. Economic and social planning.

Entry 25. Vocational and technical training of Labour.

Eighth Schedule

[Articles 344 (1) and 351]

LANGUAGES

- | | |
|---------------|--------------|
| 1. Assamese. | 2. Bengali. |
| 3. Gujarati. | 4. Hindi. |
| 5. Kannada. | 6. Kashmiri. |
| 7. Malayalam. | 8. Marathi. |
| 9. Oriya. | 10. Punjabi. |
| 11. Sanskrit. | 12. Sindhi. |
| 13. Tamil. | 14. Telugu. |
| 15. Urdu. | |

1. Higher Education and Research. Parliament has exclusive power to make laws in respect of institutions and union agencies mentioned in entries 63, 64, 65 and 66 of ‘List—Union List’. This entry is of fundamental importance as it vests on the Union Government the sole responsibility to ensure that higher education or research and scientific and technical education are not lowered at the hands of any State to the detriment of the national interests.

2. Economic and Social Planning. The entry 20 of ‘List III—Concurrent List’ relates to economic and social planning which is a concurrent responsibility of the Centre and the States. The entry 20 reads : “Economic and social planning.” The Government of India and the State Governments have to work jointly in preparing and implementing national plans for education, as educational planning is an integral part of economic and social planning.

3. Vocational and Technical Training of Labour. Constitution of India entry 25 of ‘List III—Concurrent List’ relates to education for which Parliament and the Legislature of any State (subject to certain provisions), have power to make laws. The entry 25 reads : “Vocational and Technical Training of Labour.”

4. Free and Compulsory Education. Constitution of India, Art. 45 relates to ‘Provision for free and compulsory education for children’ and it reads : “The State shall endeavour to provide, within a period of 10 years from the commencement of this Constitution, for free and compulsory education for all children until they complete the age of 14 years.” This is one of the directive principles of State policy ‘fundamental in the governance of the country and it shall be the duty of the State to apply these principles in making laws.’

5. Religious Education. Art. 15 relates to prohibition of discrimination on grounds of religion, race, caste, sex or place of birth ; and it reads ; “(1) The State shall not discriminate against any citizen on grounds only of religion, race, caste, sex, place of birth

or any of them. (2) No citizen shall, on grounds only of religion, race, caste, sex, place of birth or any of them, be subject to any disability, liability, restriction or condition with regard to (a) access to shops, public restaurants, hotels and places of public entertainment ; or (b) the use of wells, tanks, bathing ghats, roads, and places of public resort maintained wholly or partly out of State funds or dedicated to the use of the general public. (3) Nothing in this article shall prevent the State from making any special provision for women and children. (4) Nothing in this article or in clause(2) of article 29 shall prevent the State from making any special provision for the advancement of any socially and educationally backward classes of citizens or for the Scheduled Castes and the Scheduled Tribes.”

Art. 26 relates to ‘Freedom to manage religious affairs.’ It reads : “Subject to public order, morality and health, every religious denomination or any section thereof shall have the right (a) to establish and maintain institutions for religious and charitable purposes ; (b) to manage its own affairs in matter of religion ; (c) to own and acquire movable and immovable property ; and (d) to administer such property in accordance with law.”

Art. 28 relates to ‘Freedom as to attendance at religious instruction or religious worship in certain educational institutions’. It reads : “(1) No religious instruction shall be provided in any educational institution wholly maintained out of State funds. (2) Nothing in clause(1) shall apply to an educational institution which is administered by the State but has been established under any endowment or trust which requires that religious instruction shall be imparted in such institution. (3) No person attending any educational institution recognised by the State or receiving aid out of State Funds shall be required to take part in any religious instruction that may be imparted in such institution or to attend any religious worship that may be conducted in such institution or in any premises attached thereto unless such person or, if such person is a minor, his guardian has given his consent thereto.”

6. Education of Minorities. Art. 29 relates to ‘Protection of interests of minorities’. It reads : “(1) Any section of the citizens residing in the territory of India or any part thereof having a distinct language, script or culture of its own shall have the right to conserve the same. (2) No citizen shall be denied admission into any educational institution maintained by the State or receiving aid out of State funds on grounds only of religion, race, caste, language or any of them.

Art. 30 relates to ‘Rights of minorities to establish and administer educational institutions’. It reads : “(1) All minorities, whether based on religion or language shall have the right to establish and administer educational institutions of their choice. (2) The State shall not, in granting aid to educational institutions, discriminate

against any educational institution on the ground that it is under the management of a minority, whether based on religion or language."

7. Education of Scheduled Castes. Art. 46 relates to 'Promotion of educational and economic interests of Scheduled Castes, Scheduled Tribes and other weaker sections'. It reads : "The State shall promote with special care the educational and economic interests of the weaker sections of the people, and, in particular, of the Scheduled Castes and the Scheduled Tribes, and shall protect them from social injustice and all forms of exploitation." It is one of the directive principles of State Policy.

8. Education of Anglo-Indian Community. Art. 337 relates to "Special provision with respect to educational grants for the benefit of Anglo-Indian Community". It reads : "During the first three financial years after the commencement of this Constitution, the same grants, if any, shall be made by the Union and by each State for the benefit of the Anglo-Indian community in respect of education as were made in the financial year ending on the 31st day of March, 1948. During every succeeding period of three years, the grants may be less by 10% than those for the immediately preceding period of three years; provided that at the end of 10 years from the commencement of this Constitution such grants to the extent to which they are a special concession to the Anglo-Indian community, shall cease; provided further that no educational institution shall be entitled to receive any grant under this Article unless at least 40% of the annual admissions therein are made available to members of communities other than the Anglo-Indian community."

9. Instruction in Mother Tongue. Art. 350-A relates to 'Facilities for instruction in mother tongue at Primary stage'. It reads : "It shall be the endeavour of every State and of every local authority within the State to provide adequate facilities for instruction in the mother tongue at the primary stage of education to children belonging to linguistic minority groups; and the President may issue such directions to any State as he considers necessary or proper for securing the provision of such facilities."

10. Development of Hindi. Art. 351 relates to 'Directive for development of the Hindi language'. It reads "It shall be the duty of the Union to promote the spread of the Hindi language, to develop it so that it may serve as a medium of expression of all the elements of the composite culture of India and to secure its enrichment by assimilating without interfering with its genius, the forms, style and expressions, used in Hindustani and in the other languages of India specified in the Eighth Schedule, and by drawing, wherever necessary and desirable for its vocabulary, primarily on Sanskrit and secondarily on other languages."

Controversy Regarding Constitutional Provisions

Why Should Education be in the Central or Concurrent list.
The Committee of the Members of Parliament on Higher Education (presided over by Shri P.N. Sapru) which examined the whole issue

recommended that higher education at least should be inculded in the concurrent list. Shri P. N. Kirpal and Dr. V. S. Jha are of the view that the whole of education should be included in the concurrent list. In their opinion, the experience of the years since independence has shown that, for the lack of adequate authority at the Centre, national policies could not be implemented satisfactorily and that the excellent recommendations of many commissions and committees, in various fields of education, remained on paper. Even the resolutions unanimously adopted by the conferences of Education Ministers and the Central Advisory Board of Education remained unimplemented. They think that although there is some scope for more effective implementation within the present constitutional set-up by evolving suitable conventions and especially by developing new attitudes to the national character of education, these changes will not be easy to be brought about and they will not be sufficient. They, therefore, think that the Union Government should be invested with legal authority in the field of education, which should appear in the concurrent list of subjects. The constitutional amendment will, of course, take some time to take effect but the process towards this should be started as early as possible.

Constitution is Correct

The Education Commission (1964-66) observed : "We have examined this problem very carefully. We are not in favour of fragmenting education and putting one part in the concurrent and the other in the State List—education should, under any circumstances, be treated as a whole. We are also of the view that in a vast country like ours, the position given to education in the Constitution is probably the best because it provides for a Central leadership of a stimulating but non-coercive character. The inclusion of education in the concurrent list may lead to undesirable centralisation and greater rigidity in a situation where the greatest need is elasticity and freedom to experiment. We are convinced that there is plenty of scope, within the present constitutional arrangement to evolve a workable Central-State partnership in education and that has not yet been exploited to the full. The case for amending the Constitution can be made only after this scope is fully utilised and found to be inadequate. All things considered, we recommend that an intensive effort be made to exploit fully the existing provisions of the Constitution for the development of education and evolution of a national educational policy. The problem may then be reviewed again after, say, ten years."

Responsibility for Education at Various Levels

(A) Responsibility for Education at the National Level

The agencies at the national level concerned with the development of education are the Ministry of Education, the University Grants Commission and the National Council of Educational Research and Training (or the NCERT), National Board of School Education.

Functions of the Central Ministry of Education. These may be discussed under the following headings :—

1. Planning. The general policy regarding education to be followed by the States is laid down by the Central Government. The Government determines the national outlook and evolves the pattern of education to achieve this end. Various commissions and committees are appointed by it to study the various aspects of education with a view to suggesting steps for improvement.

2. Organisation. The Ministry of Education has set up many divisions to control specific fields of education.

3. Direction. For the guidance and direction of the State governments, local bodies and individual enterprises, so as to encourage education on right lines, it has set up a Central Advisory Board of Education. This Board composed as it is of representatives of all educational interests as well as states, its deliberations have been very useful and its reports have furnished valuable material both for the States and the Centre.

4. Control. It allocates funds for the States, private agencies and individual scholars.

5. Co-ordination. It serves as a co-ordinating agency of

various educational agencies to avoid conflicts, duplication and overlapping. It carries most of its activities through National Council of Educational Research and Training and University Grants Commission.

6. Clearing House Functions. All sorts of educational information to the various agencies of education is supplied. It maintains statistics regarding any activity going on in the country in the field of education. It serves as a liaison with UNESCO. Its Overseas Information Bureau gives information regarding education matters of foreign countries.

7. Pilot Projects. In the Five-Year Plan, various pilot projects for the purpose of initial encouragement and to break a new field in education have been started.

Organisation, Scope and Responsibilities of the Ministry of Education and Youth Services

Present Nomenclature of the Ministry of Education

The Ministry of Education and Youth Services discharges the educational responsibilities of the Central Government of India. The Education Minister is the overall incharge of the Ministry of Education. He is assisted by two Deputy Ministers.

It may, however, be pointed out that the Union Ministry of Education is not in charge of the entire programme of education. Other Ministries also run programmes in their specialised fields.

Historical Background

A separate Department of Education set up at the Centre in 1945 was raised to the status of a Ministry in 1947. Ten years later, it was further entrusted with scientific research. In 1958, the Ministry of Education and Scientific Research was reorganised and was bifurcated into two independent Ministeries, viz., (1) the Ministry of Education, and (2) the Ministry of Scientific Research and Cultural Affairs. In 1963, both these ministries were again combined into one Ministry known as the Ministry of Education.

In 1968, the scope of the Ministry was enlarged and it came to be known Ministry of Education and Youth Services. In March 1971 the Ministry was named as Ministry of Education and Social Welfare.

Composition of the Ministry. The Secretariat of the Ministry is headed by a Secretary to the Government of India, helped by an Additional Secretary. The Secretariat consists of 17 divisions and 6 exclusive units (including Central Secretariat Library, the divisions being grouped into 7 bureaux, six of which are headed by officers of the rank of Joint Secretary and one by that of Director. There are 23 subordinate offices and one attached office and in addition, 46

autonomous organisations that are financed and supported by the Ministry.

17 Divisions of the Ministry

1. Programme Division.
2. Pilot Projects.
3. Adult Education Division.
4. Statistics and Information Division.
5. School Education Division.
6. Unesco Division.
7. Publication Division.
8. Internal Finance.
9. Administration Division.
10. Book Promotion.
11. Hindi Section.
12. Sanskrit Division.
13. Youth Services Division.
14. Universities and Higher Education Division.
15. External Scholarship Division.
16. Union Territories and National Scholarship Division.
17. Technical Education Division.

Education—Centre-State Partnership

Different Levels of Priorities. Education is essentially a responsibility of the State Govts. But it is also a national concern and in certain major sectors, decisions have to be taken at the national level. This implies the need to regard education as a Centre-State Partnership. School education is predominantly a local-State Partnership and higher education is a Centre-State Partnership.

Role of Private Enterprise. The State should, therefore, make all possible use of the assistance that can come from the private sector for the development of education.

Role of Local Communities. As an ultimate objective, it is essential that schools and their local communities should be intimately associated in the educational process. This will harness local knowledge, interest and enthusiasm for the development of education. Besides, local bodies can make a significant contribution to the total expenditure on education.

The Role of the Central Government. Recommendations. The Education Commission is of the view that education must increasingly become a national concern and the Govt. of India should play this

role in the development of education. The Education Commission has indicated several other Central responsibilities in education apart from its role in the improvement of educational administration :—

(a) The improvement of teacher's status and teacher education.

(b) Manpower planning in crucial sectors like agriculture, engineering, medicine, etc.

(c) The development of a programme of scholarships.

(d) The equalisation of educational opportunities with special reference to the education of inter-State differences and the advancement of weaker sections of the community.

(e) The provision of free and compulsory education as directed by the Constitution.

(f) The vocationalisation of the secondary education and the improvement of standards at the school stage.

(g) The development of higher education and research with special reference to the postgraduate stage ;

(h) The development of professional education in agriculture and industry.

(i) The promotion of scientific research.

(j) The promotion of educational research.

Central Government and Financial Assistance to States

Equally important is the role of the Central Government in providing financial assistance for the development of education. This assistance will take three forms :

- (1) Grants-in-aid (including transfer of revenues) made to the State Governments on account of their committed expenditure, through the quinquennial Finance Commissions ;
- (2) Grants-in-aid for development expenditure given for the plan as a whole, through the Planning Commission ; and
- (3) Expansion of the Central and the Centrally-sponsored Sectors.

Strengthening of the Administrative Machinery

As regards the general strengthening of the administration, the constitution of the Indian Educational Service is a step of considerable importance. It is also a Central responsibility to arrange for the in-service training of educational administrators through such programmes as the conduct of an administrative staff college for senior officers of State Educational Services. The Centre should

scout for talent in different fields and make the services of the best people in the country available to the State Governments for advice and assistance in all matters.

Advisory Autonomous Bodies Associated with the Central Ministry of Education and Youth Services

1. Central Advisory Board of Education (1935)
2. Sangeet Natak Akademi, Delhi (1953)
3. Sahitya Kala Akademi, Delhi (1954)
4. Lalit Kala Akademi, Delhi (1955)
5. University Grants Commission (1956)
6. National Book Trust (1957)
7. Central Institute of English, Hyderabad (1958)
8. Central Hindi Directorate (1960)
9. Kendriya Hindi Shikshan Mandal, Agra (1960)
10. Tibetan School Society (1961)
11. National Council of Educational Research and Training (1961)
12. National Foundation for Teachers Welfare (1962)
13. Central Board of Secondary Education (1962)
14. Kendriya Vidyalaya Sangathan (Central Schools Organisation) (1965)
15. Bal Bhawan and National Children's Museum, Delhi (1965)
16. Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeetha Delhi (1967)
17. Inter-University Board of India and Ceylon (1967)
18. National Book Development Board (1967)
19. Hindi Information Centre (1968)
20. Nehru Bal Pustakalaya (1968)
21. Indian Council of Social Sciences Research (1969)
22. Bharatiya Bhasha Sangathan (1969)
23. National Board of Adult Education (1970)

education a provincial and a transferred subject limiting the control of the Central Government to the minimum. This changed the character of the Government of India from that of an executive to an advisory authority in matters of education. Imperatively a Central Advisory Board of Education was set up in 1920, but after a very short life was abolished in 1923 for economic reasons. For the next twelve years the absence of an agency to advise the Government of India on education was keenly felt. Consequently, the present Central Advisory Board of Education was revived in 1935. The Union Minister of Education is the Chairman of the Board whose composition includes distinguished educationists from all parts of the country and the representatives of the Government of India, the State Governments, the Parliament and the Universities. The function of the Board is (a) to advise on any educational question which may be referred to it by the Government of India or by any local Government and (b) to call for information and advice regarding educational developments of special interest and value to India, to examine this information and circulate it with recommendations to the Government of India and to local Governments.

Over all these years, the contribution of the Board in shaping the educational thinking of India bears a unique significance.

National Council of Educational Research and Training

The Council, popularly known as NCERT, is an autonomous organisation set up by the Ministry in 1961. It serves as an academic wing of the Ministry of Education. In particular, it undertakes independently or in collaboration with other organizations, research in the field of school education, develops new training programmes and prepares instructional materials required by teachers and students. It runs five teachers training colleges in the country.

The Council has established the National Institute of Education (NIE) to carry out its objective and serves as the chief institutional agency for developing research, advanced training and extension services.

The NCERT was reorganised as a result of the recommendations of the Review Committee's Report. The National Institute of Education of the Council has now seven Developments and the units as follows :—

- (i) Department of Social Sciences and Humanities
- (ii) Department of science education
- (iii) Department of Educational Psychology and Foundations of Education
- (iv) Department of Teaching Aids
- (v) Department of Textbooks
- (vi) Department of Primary and Pre-Primary Education

- (vii) Department of Teacher Education
- (viii) Data Processing and Educational Survey Unit
- (ix) Library, Documentation and Information Services.

Significant Activities of the NCERT

I. Science Education

- (i) UNESCO/UNICEF assisted Pilot Project
- (ii) Preparation of Textbooks
- (iii) National Science Talent Scheme
- (iv) Summer Schools for Students
- (v) Central Science Workshop
- (vi) Development of Films, Slides and Brochures for effecting qualitative improvement in Science Education

II. Text-books

- (i) Preparation of Text-books
- (ii) Crash Programme for Evaluation of School Text-books.
- (iii) Study of the Modern Management Techniques of Text-book Production
- (iv) Orientation Programmes for Text-book Authors
- (v) Consultative Services to various States and Text-book Agencies in the preparation of text-books in different School Subjects
- (vi) Establishment of the National Centre for Textual Material

III. Examination Reform Programme

- (i) Evaluation Workshops
- (ii) Seminars
- (iii) Publication of Brochures

IV. National Prize Competition for Children's Literature

- (i) Development of Children's Literature Evaluation Tool (CLET)

V. Pre-Primary Education

- (i) Development of Curriculum
- (ii) Handbook for Teachers 'Programmes and Activities for Balwadis'

VI. Primary Education

- (i) Development of Minimum Curriculum Standards
- (ii) Development of Work-Experience Programmes
- (iii) Experimental Projects
- (iv) National Workshops on Projects like Wastage and Stagnation
- (v) Training Courses
- (vi) Tribal Education Unit

VII. Educational Psychology

- (i) Various Research Programmes including Development Norms for Children
- (ii) Diploma Course in Educational and Vocational Guidance
- (iii) Workshops

VIII. Social Sciences and Humanities

- (i) Curriculum Development
- (ii) Preparation of Instructional Materials
- (iii) Text-books
- (iv) Workshop on Population Education

IX. Audio-Visual Aids in Education

- (i) Organisation of Training Programmes in Audio-Visual Aids
- (ii) Production of Films, Film Strips, etc.
- (iii) Competition on Improvised Teaching Aids
- (iv) Preparation of Audio-Visual Aids

X. National Integration Through Education

- (i) Organisation of Inter State Camps

XI. Educational Surveys

- (i) Sample Survey of Secondary School Teachers
- (ii) All India Educational Surveys

XII. Teacher Education

- (i) Study of Admission Procedures in Teacher Training Institutions
- (ii) National Survey of Teacher Education

- (iii) Research in Teacher Education
- (iv) Teacher's Seminar Reading Project
- (v) Four Regional Colleges of Education at Ajmer, Bhopal, Bhubaneshwar and Mysore
- (vi) Central Institute of Education
- (vii) In-Service Education Programmes for Teachers

XIII. NIE Library

About one lakh books and 4000 bound journals

(B) Responsibility of the State Governments in Education

The Education Commission 1964-66 felt "The responsibility of school education will rest squarely on the State Governments. The local authorities will, no doubt, have a good deal of initiative and we should like the State Governments to encourage them by adopting flexible policies. But, by and large, they will act as agents of the State Governments and exercise delegated powers." The State Education Departments, which are the principal agency of the State Government to deal with education matters, should :

1. develop an intensive programme for school improvement which would include periodical revision and upgrading of curricula, preparation of text-books, teachers' guides and other teaching and learning materials, and improvement in methods of teaching and evaluation ;
2. prescribe the standards to be maintained in schools, in consultation with professional bodies like the State Board of School Education, and State Evaluation Organisation and enforce them through the inspectorate, provision of funds, and organisation of the needed supporting services ;
3. be responsible for the supply of teachers, for fixing their remuneration, retirement benefits and conditions of work and service, and for organising teacher preparation—both pre-service and in-service—on proper lines and for establishing, conducting or aiding training institutions of high quality with adequate intakes and outputs ;
4. be solely responsible for inspection and supervision of schools which may be exercised directly through the officers of the State Education Departments or indirectly through a special organisation set up for the purpose, e.g., the State Boards of School Education or both ;
5. establish and maintain a State Education Organisation whose work would be to co-ordinate standards as between the different districts in the State and to help in the development of national

standards at the end of the higher primary, lower secondary and higher secondary stages ;

6. encourage, guide and assist the local authorities created for the administration of school education and help them maintain quality institutions at different stages of school education and provide a regular programme of extension services in schools in order to secure a continual improvement of standards ;

7. establish and maintain a State Institute of Education whose primary objective is to help, through suitable programmes of research, training and extension, the local authorities and the inspecting officers to improve standards ; and

8. co-ordinate and eventually assume responsibility for all vocational and technical education at the school stage.

State Boards of School Education. The Education Commission recommends that in each State, a State Board of School Education should be established and it should take over the functioning and the responsibilities of the existing Boards of Secondary Education and allied agencies such as the Bureau of School Examination. It should consist of a full time Chairman, representatives of Departments (other than education) which may be in charge of education (e.g., medicine, industries, agriculture, etc.), some senior officers of the Department, representatives of the universities, representatives of the District School Boards, headmasters and teachers of secondary and primary schools and educationists. It should have two full-time Secretaries—one for the administrative section to be in charge of all the routine work of holding examinations, and the other to be in charge of the academic unit which will be mainly concerned with the periodical inspections of secondary schools and with the improvement of examinations in collaboration with the State Evaluation Organisation. The Board should be established by law and should have large powers and freedom to enable it to function and discharge its responsibilities satisfactorily. This would be greatly facilitated if its finances are not treated as government revenue and credited to the treasury (as in Mysore), but are pooled together in separate fund managed and maintained by the Board (as in Maharashtra).

Function of the Board

1. To advise State Governments in all matters relating to education.
2. To prescribe condition for recognition to primary and secondary schools.
3. To arrange inspection of schools.
4. To conduct examinations.

State Governments

Education is primarily the responsibility of the State Governments. Ninety per cent of the total expenditure on education from public revenues passes through their budgets ; and 98 per cent of the personnel engaged in education are under their control. What education is to be at the school stage, depends almost entirely in the policies laid down by them, and even in higher education their influence is extensive and often decisive.

It may be noted that the Minister of Education is not responsible for the entire education of the State. General Education is his responsibility but other ministers and departments have under their control schools and colleges pertaining to their specialised branches like medical education, technical education, agricultural education, industrial education, and the like.

The State Department of Education is organised at two focal points ; the policy-making and co-ordination function in the secretariat and the direction, regulation and inspection function at the directorate.

The Secretary is the administrative head of the secretariat. He is directly responsible to the Minister of Education. He is often a member of the Indian Administrative Service and is assisted by one or two Deputy Secretaries and a few Assistant Secretaries.

Educational Administration at the State Level. (1) It is desirable to create, at the State level, some machinery to co-ordinate educational programmes which are spread over a number of departments and take a unified view for purposes of planning and development.

(2) A statutory Council of Education should be created at the State level with the State Minister for Education as the Chairman. Its membership should include representatives of universities in the State, all Directors in charge of different sectors of education and some eminent educationists. Its principal functions would be to advise the State Government on all matters relating to school education, to review educational developments in the State and to conduct evaluation of programmes from time to time through suitable agencies. Its annual report along with its recommendations should be presented to the State legislature.

(3) A standing committee at the officer's level which would include all State level officers in charge of different sectors of education should meet periodically under the chairmanship of the Education Secretary.

(C) Role of Local Bodies in Education

Recommendations of the Education Commission 1964-66

The Education Commission felt, "The close involvement of

schools with their communities is a principle of great educational significance, and this is the direction in which we should move. At the same time, the difficulties caused to teachers under local authority management cannot be ignored and at least in the transitional stage, adequate safeguards would have to be provided to teachers. Local authorities should realise their responsibilities and ensure that they help rather than hinder the cause of education. Here we are more inclined to agree with the Kher Committee that the decision to associate local authorities with the administration of education should be taken not on political but on educational grounds and that the only justification for such a decision should be a conviction that it would promote the cause of education and bring the goal of providing universal education nearer. Similarly, local authorities should not be encouraged to think that they can claim to administer education as a matter of right and that this right will continue with them in spite of bad administration or harassment of teachers. The normal practice should be that a local authority is given the right to administer education as a privilege subject to two conditions—promoting the cause of education and good administration—and that this privilege would be withdrawn if either of these conditions is violated. There is no need to insist, as is often done at present, that a uniform policy must be adopted in all parts of the country simultaneously. It would be in the larger interests of education to adjust the experiment to local conditions and permit each area to progress at a pace and in manner best suited for its growth."

In view of these broad principles, the committee recommended that the future role of local bodies in education may be defined as follows.

- (a) **Ultimate objective.** As an ultimate objective it is essential that schools and their local communities should be intimately associated.
- (b) **Association with Reference to Local Conditions.** It would, however, not be proper to look upon this democratic decentralisation as an end in itself and to press for their universal and immediate adoption without reference to local conditions.
- (c) **Immediate Goal in this Respect.** The immediate goal in this respect—and this should be adopted immediately as a national policy in all the States—is to associate the rural areas and the municipalities in urban areas, with their local schools and to make them responsible for the provision of all non-teacher costs with the help, where necessary, of a suitable grant-in-aid from the States.
- (d) **Ultimate Goal—District School Boards.** The ultimate goal to be reached is the establishment, at the district level, of competent local education authorities which may be

designated as the District School Board and which would be in charge of all education in the district below the university level. This should also be accepted as national policy.

- (e) **Not Necessarily a Common Policy.** While the Centre may advise the States to move towards the ultimate objective as soon as practicable, it would be wrong to pressurise all States to adopt some common policies in the matter.
- (f) **Provision of Safeguards for Teachers.** In all such associations of the local authorities with education, adequate safeguards should be provided to ensure that the teachers are not harassed and they do not get involved in local factions and politics.

Jurisdiction of the District School Board. The jurisdiction of the District School Board should cover the entire area of the district with one exception, namely, the big municipalities in the district. The Zila Parishad, municipalities, educationists and concerned Departments should be represented on it.

Whole Time Secretary of the Board. A senior officer of the State Government should be the whole-time Secretary of this Board, which should be provided with the necessary administrative and supervisory staff.

Functions of the Board. 1. The functions of the Board would cover all school education in the district—general as well as vocational.

2. It will directly administer all government and local authority schools within the district.

3. It will also remain in charge of giving grants-in-aid to all private institutions in the district in accordance with the rules framed by the State Government for the purpose.

4. It should be a responsibility of the Board to prepare plans for the development of school education within the District.

5. It should also be the principal agency within the district to develop school education.

6. Each school board will maintain an education fund. The Zila Parishads (or Municipalities) will approve the budget of the School Boards. They will also raise the resources expected of them and credit them to the School Board. In all day-to-day administration, the School Board would be autonomous. The same relation would hold good between a Municipal School Board and its Municipality. The finances and guidance required for the purpose would be provided by the State Government and the State Education Departments.

In big towns with a population of one lakh or more it would be desirable to establish Municipal School Boards on the above lines since these would be viable administrative units. The composition, powers and responsibilities of these Boards should be similar to those of the district school boards.

7. The recruitment and transfers will be done by a special committee consisting of the Chairman of the Board, its Secretary and the District Education Officer, subject to rules framed by the State Government, the general policy being to reduce transfers to the minimum and to allow teachers to develop loyalties to individual institutions.

8. It may be better in some cases not to burden the school boards with full administrative responsibility all at once. Powers may be conferred on a board as it becomes experienced and shows its capacity to exercise them.

Grant-in-Aid to Municipalities : (1) It should be made obligatory for the Municipalities to bear a certain proportion of the cost of education. For this purpose, they should levy a cess on lands and buildings.

(2) For the purpose of Government grants, the Municipalities should be classified into groups on the basis of their wealth and the poorer Municipalities should be given grant-in-aid at a higher rate than others.

(3) All Corporations should be made responsible for supporting at least primary education within their jurisdiction. The Government grant to them should be on a proportional basis so that the Corporations contribute a certain percentage of the expenditure from their own funds.

Grant-in-aid to Zila Parishads. (1) The system of grant-in-aid from the State Government to Zila Parishads should be reformed on the following lines.

- (a) 100 per cent grant for salaries and allowances of teachers and other administrative and supervisory staff sanctioned by the Government. Definite norms regarding the number of teachers required and the administrative and supervisory staff needed should be fixed.
- (b) For non-teacher costs, a block grant per child in attendance should be given. The amount of this grant should be fixed separately for each category of schools and should be revised after every 3 to 5 years.
- (c) The resources raised locally by a Zila Parishad as well as the State grant thereon should be left with the Zila Parishad for such developmental programmes as it deems necessary; and

(d) Grant-in-aid for non-recurring expenditure should be given separately, preferably at about two-thirds of the expenditure.

(2) The amount of grant-in-aid given by the State Government to Zila Parishads should be allowed to be funded and not made to lapes at the end of the financial year.

Present Position of Local Administration in Education in India

In urban areas, the municipalities have been associated with education in Andhra Pradesh (Andhra area), Bihar, Gujarat (Bombay area), Madhya Pradesh (Maha Koshal area), Madras (Madras area), Maharashtra (Bombay and Vidarbha areas), Mysore (Bombay and Madras areas) and Orissa (old Orissa province area). In the rural areas, the panchayati raj institutions have been introduced and placed in charge of education in all States except Jammu & Kashmir, Kerala, Madhya Pradesh, Mysore, Nagaland and Punjab. The method of association is also not uniform. The municipalities are generally in charge of primary education; but they can also undertake other educational activities at their discretion. The panchayati raj institutions have been entrusted with lower primary education in some States (e.g., West Bengal); with the whole of primary education in some others (e.g., Madras); and with both primary and secondary education in two States (Andhra Pradesh and Maharashtra). Authority over education has been delegated to the block level in some States (e.g., Rajasthan and Madras); and to the district level in some others (Maharashtra). The system of administration and grant-in-aid also shows similar variation.

Education Acts

At present the educational legislation in the country presents a motley picture : in most States, it is scattered in a number of laws and the bulk of it is still in the form of executive orders, the only State to have an Education Act being Kerala. The Commission therefore, recommends that education should be given a statutory basis everywhere and in all sectors and that an Education Act should be passed in all the States and Union Territories. This should be a comprehensive and consolidating measure which will replace all the miscellaneous laws which now exist and which will also provide a statutory basis for certain important aspects of administration (for example grant-in-aid code) which now exist merely in the form of executive orders.

Constitutional Provisions regarding Private Enterprise

Private schools have a right to exist under the present Constitution, irrespective of the fact whether they are or are not recognised

or aided by the State. For instance, Article 30 lays down that 'all minorities, whether based on religion or language, shall have the right to establish and administer educational institutions of their choice' and that these shall not be discriminated against in matters relating to grant-in-aid on the ground that they belong to such minorities. Articles 28(1) and 28(2) imply that all citizens shall have the freedom to establish private educational institutions in order to provide religious instruction of their choice. The right to establish private schools for any purpose whatsoever has also been given to all citizens under clauses (c) and (g) of Article 19 which provide that all citizens shall have the right 'to form associations' and 'to practise any profession, or to carry on any occupation, trade or business' and which obviously cover the right of individuals and groups to establish and conduct educational institutions of their choice. Private schools may, therefore, be established under these provisions of the Constitution and, if they do not seek aid or recognition from the State, they will have to be treated as being outside the national system of public education.

Private Enterprise in Education

Recommendations of the Education Commission on the Role of Private Enterprise in Education.

1. It is true that some forms of private enterprise have made a negative rather than a positive contribution to education. At the same time, we should recognise that private enterprise has played an important role in the development of education in modern India, that a large proportion of our good institutions are in the private sector and that it can continue to make a useful contribution to the development of education in the years ahead. The State should, therefore, make all possible use of the assistance that can come from the private sector for the development of education.

2. The growing educational needs of a modernising society can only be met by the State and that it would be a mistake to show any over-dependence on private enterprise which is basically uncertain. As the State has now rightly assumed full responsibility to provide all the needed educational facilities, private enterprise can only have a limited and minor role.

3. Under the Constitution, private schools have a right to exist and if they do not seek aid or recognition from the State, there need be little or no interference with them.

4. The position with regard to private educational institutions which seek financial support from the State is, however, different. Even now, they depend upon Government for the larger part of their expenditure; and when fees, which is their main source of income, are abolished, their dependence on public revenues would be very large. These should, therefore, be gradually assimilated with the system of public education on the lines described earlier.

Unrecognised Schools. It may be desirable to introduce legislation for the compulsory registration of all educational institutions and should be made an offence to conduct an unregistered institution. Power should also be vested in the State Government to remove any educational institution from the register if stipulated conditions are not fulfilled.

Centralisation vs. Decentralisation of Education. Different practices are followed in different countries. The general pattern followed in democratic countries is that of decentralisation. The example of the U.S.A. is the most striking one so far as the system of decentralisation of education is concerned. Decentralisation of educational administration encourages local effort and provides opportunities for smaller groups and individual citizens to participate in the business of education.

The U.S.S.R. seems to be the pioneer in the field of centralisation of education.

Vernon Millinson traces the origin of centralisation of education to the 17th and 18th centuries. According to this writer, "The principle of centralisation of education was first enunciated by Law Chalotais in 1703, upheld by the writers of the French Revolution, and cast in its final practical mould, by Napoleon in 1808."

The centralised system of educational administration has these advantages :—

1. A uniform system of education can be built up.
2. The needs of the entire country can be kept in the forefront.
3. Since Centre has big finances at its disposal, different types of projects and experiments can be undertaken very easily.
4. There is a better co-ordination of educational efforts and overlapping in experiments of different regions can be avoided.

As against these advantages centralisation provides little for the initiative of the small groups. There is every danger of distant regions being overlooked. The greater the decentralisation of administration the better and quicker is the development of the individual.

Complete centralisation is as much harmful as the domination of the Centre. It is thus clear that a harmonious balance must be struck between centralisation and decentralisation. The English system of educational administration seems to be a beautiful blending of the two extreme types—centralisation and decentralisation.

State Management and State Control of Education

State management of education implies that the education institutions in the State are brought into existence by the State, are

financed by it through the government offices and are also administered by persons directly appointed by government. There are no educational institutions other than the government.

State control of education means the overall control exercised by the State over educational institutions. There are educational institutions financed and managed by bodies other than the government. These bodies may be educational trusts, religious bodies, local boards, social bodies, etc.

State management of educational institutions is likely to bring red-tapism and smother all initiative and inventiveness. The private institutions have greater chances of going in for educational experimentation for the heads of these institutions and their masters are always ready to decide upon things in a quicker and better way.

Need for an Effective and Healthy State Control. In the democratic structure when the government is through and through responsible for the education of its people, when it has decided to prepare the children for the social order which it wants to build up, it is but inevitable that the State should adequately supervise, guide and control the educational system. It adopts the following methods for the purpose of effective control over education.

1. It lays down the educational policy relating to the aims and objectives which all educational institutions in the country are expected to follow.

2. It appoints committees and commissions for studying the prevailing conditions in the different stages of the educational ladder and suggesting suitable steps for the eradication of defects.

3. It makes these recommendations available to the educational institutions for the necessary reforms which are to be undertaken.

4. It gives sufficient sums as grant-in-aid to the institutions other than those of the government.

5. It prescribes curricula, various courses of study, etc.

6. It makes suitable arrangements for research and experimentation in the field of education and finances institutions of higher education and research, training and experimentation.

7. It arranges for the conduct of public examinations.

8. It appoints officers whose function is to inspect and supervise the work of the various institutions and to see that certain minimum standards of instructional efficiency, discipline and the like are maintained.

Types of Management of Schools

- (1) Schools managed by the Centre or the States. In recent

Before the provincialisation of the High, Middle and Primary Schools maintained by the local bodies, the Punjab Government used to set aside annually a sum of money to be paid from provincial revenues as grants towards the approved expenditure of local bodies on account of Vernacular education. Such grants were made in accordance with a scale determined by Government and up to a prescribed maximum which was communicated each year. Since 1 October, 1957, these grants have been stopped.

(3) Schools managed by Religious Organisations. A number of religious bodies like the Arya Samaj, the Sanatan Dharma Sabha have opened many schools and contributed a lot to the expansion of educational facilities. The level of efficiency maintained by these schools is considerably high. The products of these institutions have played an important role in the freedom struggle of the country.

However, certain undesirable tendencies are also noticed in such institutions. Some of them indulge in the spread of communal feelings which spoil the peace of the State. In some cases, staff is recruited with a religious or sectarian consideration. Some of them suffer from overcrowding and ill-qualified staff.

(4) Registered Trust Boards. Many registered Trust Boards are maintaining schools. In many cases it is laid down that the schools shall be run exclusively for certain purposes or for certain sections of the population exclusively. The Commission does not encourage such tendencies and recommends that legislation should be passed in such cases to permit the admission of all the children to such schools.

(5) Schools managed by Private Managements. There is also a fairly large number of schools which are run by private bodies. The Commission suggests that all such bodies should be registered and should function as registered associations.

(6) Schools managed by Individuals. A number of schools are run as "proprietary schools by individuals. The Commission is of the opinion that no Secondary School should be run on such lines but should be governed by a suitable managing board registered under the Companies Act.

Objectives of Education in India

Education—a Social Activity. Through education, a society transmits its way of life to succeeding generations. Education is thus a social activity. One objective of education is that the younger generation be prepared for its role as responsible members of the community, capable of making decisions and continuing and, possibly, improving the society's way of life. All forms of human society make some kind of educational provision for this purpose, whether it be through the simple forms of education within a tribal framework or through an elaborate system of schools. The form of education provided is determined in large part by the values of the society. In modern democratic societies education has to play an important role. Ignorance prevents the democratic ideal from becoming a reality. Thomas Jefferson, writing in 1820, expressed the importance of education in a democracy : "I know no safe depository of the ultimate powers of society but the people themselves; and if we think them not enlightened enough to exercise their control with a wholesome discretion, the remedy is not to take it from them, but to inform their discretion by education." The same view, reinterpreted in the light of the conditions of the modern world, was expressed in 1951 by James Torres Bodet, then Director General of UNESCO : "As peace is indivisible, so are democracy and social progress indivisible. As long as one half of the human race is unable to read the very declaration of its rights and duties, understand the text of a law, to consult the most elementary books on agriculture and machinery, it will continue to be at the mercy of forces which it can neither control nor comprehend. And we would have to admit that democracy does not reign on earth."

Education Related to Time and Space. Good aims are related to real situations of life. An organised system of education must meet the real situations of a community. It must be in accordance with the physical and social needs of the community. The intrinsic needs and activities of the child are closely related to the needs of the community. A child is not to be educated in a vacuum. He is a member of the community in which he lives and education must help

him to become a useful member of that society. Of course, in the process of making him a useful member of the society, he should not be overburdened with many "do's" and "don'ts".

Since physical, social and economic needs differ from place to place, from time to time and country to country, the educational system, its curriculum, syllabi, methods and techniques must also be more or less different in different countries at different places. Changes in the ideals and values accepted by a society, will call for corresponding changes in the system of education. Nothing is held as true and valuable for all times.

Education in Primitive Times. In ancient times men needed training in the use of bows and arrows for their safety. Their needs were simple and a few. The process of production, consumption, distribution and exchange was quite simple. Thus the educative needs were also simple and these could be met by a process of education which was also very simple.

Aim of Education in Sparta. The surroundings and situations in which the State existed and grew up demanded that their educational system must enable the individual to serve the interests of a strong militaristic state.

Aim of Education in a Totalitarian State. The aims of education are determined by the political ideologies. J. F. Brown says, "Education in any country and at all periods reflects values of the ruling class". There are many instances in the history of the world when persons with different ideologies from their rulers were threatened, sacked and even assassinated. In Russia, the individual will be trained in a way so as to become a Communist, in Germany a Nationalist Socialist, in Italy a Fascist. The aim of education is to force upon every individual an ideology which he must not question. This creed will be reflected in the curriculum, syllabi, methods and techniques of education.

Aim of Education in Ancient India. Education in ancient India was in the hands of the Brahmins and religion played an important role in the life of an individual. Indian education aimed at inculcating a spirit of piety and righteousness. Education constituted a real training for living life according to spiritual and moral values.

Aim of Education in Muslim India. The aim was religious and the educator was required to produce pious and religious minded people. *Maktabas* and *Madarsas* were the places where education was imparted. These institutions were generally run in mosques.

Aims of Education in British India. There was a radical change in the aims of education with the advent of British rule in India. Lord Macaulay laid down the aims of education in the famous Minutes of 1835. The aim of the educational system was to train an army of individuals who could assist the Britishers in the administration of this country. He wanted an educational system which might bring about the cultural conquest of the people of India.

Objectives of Education in India

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neither reject the old because it is old nor accept the new because it is new, but dispassionately examine both and courageously reject whatever arrests the forces of justice and progress.

Clearness in Speech and Writing. To be able to make one's influence felt and to assist in the formulation of healthy public opinion, an educated person should be able to express himself clearly both in speech and writing. This is an essential pre-requisite for successful living in a democracy which is based not on force but on free discussion, persuasion and peaceful exchange of ideas.

Education is the Art of Living in a Community. An individual cannot live and develop alone. He is essentially a social being. Both for his own wholesome development and the good of society, it is essential that he should learn to live with others and to appreciate the value of cooperation through practical experience and free interplay with other personalities. No education is worth the name which does not inculcate the qualities necessary for living graciously, harmoniously and efficiently with one's fellow men. Amongst the qualities which should be cultivated for this purpose are discipline, cooperation, social sensitiveness and tolerance.

Passion for Social Justice. Our education must develop a passion for social justice, based on sensitiveness to social evils and the exploitation which corrupts the grace of life. Passion must be kindled in the heart and mind of our people and the foundation for it should be laid in the school.

Development of Tolerance. Our educational system must stress the importance of tolerance, without which it is impossible to preserve the health and even the existence of a democracy. If a democracy like ours is to survive, a democracy which harbours so many faiths, races and communities—education must cultivate in our youth an openness of mind and largeness of heart which would make them capable of entertaining and blending differences in ideas and behaviour into a harmonious pattern.

Development of True Patriotism. True patriotism involves three things—a sincere appreciation of the social and cultural achievements of one's country, a readiness to recognise its weaknesses frankly and to work for their eradication and an earnest resolve to serve it to the best of one's ability, harmonising and subordinating individual interests to broader national interests.

Development of Internationalism. Education should enable an individual to realise the fact that we are all members of one world and prepare him mentally and emotionally to discharge the responsibilities which such membership implies.

2. Improvement of Vocational Efficiency. The second important aim of our educational system would be to increase the productive or technical and vocational efficiency of our students. This includes (a) creating a new attitude that implies an appreciation of the dignity

of all work, however slowly ; (b) making the students realise that self-fulfilment and national prosperity are only possible through work in which every one must participate and a conviction that when our educated men take any piece of work in hand they will try to complete it as efficiently and artistically as their powers permit ; (c) making attempts by all the teachers to ensure that such an attitude on the part of the students finds expression in every activity of the school ; and (d) promotion of technical skill and efficiency at all stages of education so as to provide trained and efficient personnel to work out schemes of industrial and technological advancement.

Provision of diversified courses at the secondary stage should be made so that a large number of students may take up agricultural, technical, commercial or other practical courses which will train their varied aptitudes and enable them either to take up vocational pursuits at the end of the Secondary course or to join technical institutions for further training.

3. Development of Personality. This includes : (a) Releasing the sources of creative energy in the students so that they may be able to appreciate their cultural heritage.

(b) Cultivating rich interests which they can pursue in their leisure and contribute in later life, to the development of this heritage.

(c) Giving a place of honour in the curriculum to the subjects like art, craft, music, dancing and the development of hobbies.

4. Development of the Qualities for Leadership. This is important for the successful functioning of our democracy. Education must train our students for discharging their duties efficiently ; they must be trained in the art of leading and following others. Our secondary education must train persons who will be able to assume the responsibility of leadership—in the social, political, industrial or cultural fields—in their own small groups of community or locality.

Leadership calls for a higher standard of education, a deeper and clearer understanding of social issues and greater technical efficiency.

Education Commission 1964-66 on the Objectives of Education

The Commission observed, "The most important and urgent reform needed in education is to transform it to endeavour to relate it to the life, needs and aspirations of the people and thereby make it a powerful instrument of social, economic and cultural transformation necessary for realisation of the national goals." For this purpose the Commission suggested a five-fold programme :

1. Relating Education to productivity.

2. Strengthening social and national integration through educational programmes.

3. Consolidation of democracy through education.
4. Development of social, moral and spiritual values.
5. Modernisation of society through awakening of curiosity, development of attitudes and values and building up certain essential skills.

1. Education and Productivity Objective. Following programme has been suggested :

- (a) Science education to become an integral part of school education and ultimately a part of all courses at university stage.
- (b) Work experience to become an integral part of all education.
- (c) Orientation of work experiences to technology and industrialisation.
- (d) Application of science to productive processes, including agriculture.
- (e) Vocationalisation of secondary education.
- (f) Agricultural and technical education to be emphasised.

2. Social and National Integration Objective. Following steps have been suggested to strengthen national consciousness and unity :—

1. Adoption of a common school system of public education as the national goal and its effective implementation in a phased programme spread over 20 years.
2. Organisation of social and national service programmes concurrently with academic studies in schools and colleges and to make them obligatory for all students at all stages.
3. Development of community life in every educational institution.
4. Getting much of the work needed in the educational institutions and hostels done by the students.
5. Participation of the students in programmes of community development and national reconstruction at all stages of education.
6. Continuation of N.C.C. on its present basis till the end of the Fourth Five-Year Plan.
7. Exploration of the possibility of providing N.C.C. training on a whole-time basis, in a continuous programme of about 60 days at the undergraduate stage.
8. Development of alternate programme of social service.
9. Formulation of an appropriate language policy.
10. Adoption of regional language as the medium of instruction.
11. Adoption of this programme within ten year.

12. Energetic action for the production of the text-books and technical books in regional languages and the special responsibility of the universities assisted by U.G.C.
 13. The eventual adoption of Hindi to be considered in due course subject to certain safeguards.
 14. Regional languages to be made the language of administration for the regions concerned at the earliest possible time.
 15. Continuation of the promotion of the teaching and study of English right from the school stage.
 16. Continuation of the use of English as the medium of instruction at All-India institutions.
 17. Encouragement to be given to the study of other languages of international communication.
 18. Special attention to be given to the study of Russian.
 19. English language to serve as a link-language in higher education for academic work and intellectual inter-communication.
 20. Hindi to serve as the link language of the majority of our people.
 21. Adoption of all measures for the spread of Hindi in the non-Hindi areas.
 22. Provision of multiple channels of inter-state communication in all modern Indian languages.
 23. Provision for making adequate arrangement for teaching different modern Indian languages.
 24. Establishment of strong departments in some of the modern Indian languages in every university.
 25. Combining two modern Indian languages at the B.A. and M.A. levels.
 26. Promotion of national consciousness through the promotion of understanding and re-evaluation of our cultural heritage and the creation of a strong driving faith in the future towards which we aspire.
- 3. Education and Consolidation of Democracy.** The Commission has suggested the following steps :
- (i) Provision of free and compulsory education of good quality for all children up to the age of 14 years as envisaged in Article 45 of the Constitution.
 - (ii) Organisation of programmes of adult education aiming not only at the liquidation of illiteracy but also at raising the civic and national efficiency and general cultural level of the citizens.
 - (iii) Training of efficient leadership at all levels by expanding secondary and higher education.

(iv) Provision of equal opportunities to all children of merit and promise irrespective of economic status, caste, religion, sex or place of residence.

(v) Development of a scientific mind and outlook, tolerance, concern for public service, self-discipline, self-reliance, initiative and a positive attitude to work.

4. Education and Modernisation. (i) Awakening of curiosity, the development of proper interests, attitude, and the building up of such essential skills as independent study and capacity to think and judge for oneself.

(ii) Creation of an intelligentsia of adequate size and competence.

5. Development of Social, Moral and Spiritual Values. The Commission suggested the following :

(a) Adoption of measures by the Central and State Governments to introduce education in moral, social and spiritual values in all institutions under their (or local authority) control on the lines recommended by the University Education Commission and the Committee on Religious and Moral Instruction.

Same steps to be taken by the privately managed institutions.

(b) Setting apart of some periods in the time-table for this purpose apart from education in such values being made an integral part of school programmes generally.

(c) Such instructions to be given by general teachers, preferably from the different communities; considered suitable for the purpose.

(d) Special concern of the University Departments in Comparative Religion with the ways in which these values can be taught wisely and effectively.

(e) Undertaking preparation of special literature for use by students and teachers by these Departments.

(f) Promotion of tolerant study of all religions so that citizens can understand each other better and live amicably together and the inclusion of syllabus giving well chosen information about each of the major religions as a part of the course in citizenship or as part of general education to be introduced in schools and colleges up to the first degree.

(g) Highlighting the fundamental similarities in the great religions of the world in the emphasis they place on the cultivation of certain broadly comparable moral and spiritual values.

(h) A common course on this subject in all parts of the country and the preparation of common text-books at the national level by the competent and suitable experts available on each religion.

General Observations

Work Experience—A Convincing Case. *The Times of India* on July 3, 1966, stated :

"The Commission makes out a convincing case for inclusion of work-experience and social service as an essential part of the school system. But effective enforcement of these reforms will call for a degree of imagination and organisation beyond the capacity of most State administrations. The new schemes will no doubt promote closer links between the students and the people. But unless such contacts are fruitful they can lead to a further decline in academic standards by keeping the students away from their studies. This has precisely the experience in Punjab when in the wake of partition the social work done by students was taken into account in awarding degree.

"To emphasise 'work experience' is to make sure that young people do not get detached from the realities of the Indian environment. The 'streak of quality' is inescapable because it would be impossible to give high quality education to everyone. Linking agriculture to education is essential because agriculture is still the key to Indian development and, as the Commission repeats, 'the agricultural revolution has yet to begin in our country.'

Work Experience Appreciated. "...Of the Commissions other recommendations the most crucial are those intended to make the teaching of science an integral part of school education and to provide for 'work experience' to students at different levels. It wants secondary education to be increasingly vocationalised.

(The Patriot, July 2, 1966)

Harmony between Science and Culture. "There has all along been a controversy between those whose ideal is the complete modernisation of our way of life and those who are anxious to preserve the traditional values inherited from the past. The Commission has gone into this controversy and has formulated a reconstructed system of education which while based on science will also be in coherence with Indian culture and values. This is as it should be. In the history of the nations, in the developing areas of the world every attempt should be made to preserve the continuity of national life although progress demands utilisation of modern science and technology. It should be the object of education to maintain a correct balance between what is valuable in the legacy inherited from the past and the needs and requirements of the present day.

(Educational India, July 1966)

Emphasis on Science and Technology. (*National Solidarity*, 7th July, 1966) "The Commission has rightly emphasised to make our education science and technology oriented; while at the same time it should not lose touch with what is best in our culture and philosophy and what constitute the pride values of our way of life. The education

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has to serve vital national purposes and therefore, the Commission could not but lay stress on making it a vehicle of national reconstruction that leads our teeming millions to economic emancipation.

Our urgent national need is highly trained and highly imaginative technical personnel, engineers, scientists and planners. We need them in large numbers. So the Commission has suggested teaching science and mathematics from an early stage. But at the same time it is not intended to produce large number of human robots. No, that will be rendering education into a inhuman mechanism. We must, of course, have, engineers, technicians and other scientific personnel but these must be imbued by the true spirit, tradition and values of worthy life that our country prides. Then alone can they help in building a great, worthy and free nation which is both prosperous and spiritually alive. And the Commission has not overlooked this vital aspect of education."

Pre-Primary Education or Nursery Education

Importance

The Education Commission (1964-66) stressed the importance of pre-primary education as "Pre-primary education is of great significance to the physical, emotional and intellectual development of children, especially those with unsatisfactory home backgrounds."

A Report of the Committee on the Pre-Primary Education in Mysore State (1961) observed :

"We are of the firm opinion that planned and immediate expansion of the Pre-Primary Education is essential at the present stage of our development."

1. Need for Proper Educational Environment. There is a general feeling that the prevailing educational backwardness of large sections of our children is due to the lack of a proper educational environment in most homes, especially in the villages and that something must be done.

2. Provision of Equal Educational Opportunities. Provision of equal educational opportunities to all is a fundamental principle on which a truly democratic society can be built up. It is an article of faith in that great democracy of the U.S.A. and it is so with us today.

3. Filling the Gap between the Rural and Urban Children. The widespread provision of facilities for Pre-Primary Education will tend to minimise the gaps that exist between the children in the villages and those in the towns and between the children in poor homes and those who are born in the richer ones. To quote from a Bombay report :—"The average home is in many ways inadequate to meet the needs of children of the age of 2½—6 and if these needs are not met at the right stage, the child's future development stands in very

great danger of being hampered, either perceptibly or imperceptibly." The universal desire for the immediate spread of facilities to the rural areas is typified by the opinion expressed by one of our respected elders in the Rajya Sabha in reply to a point raised in our questionnaire :—"In the rural areas, Pre-Primary Education is essential. It must be provided by the State with the help, if possible, of the private agencies. For the rural areas, we must have the best possible teachers."

4. Physical Well-being of Children. There is another aspect of the question pertaining to the physical health and well-being of our children which makes immediate expansion of provision of Pre-Primary Education essential. Most of our children are exposed to the handicaps of unsatisfactory and insufficient nutrition. Physical defects and disabilities become more pronounced at the Pre-School stage of growth and if attended to in time will tend to eliminate these defects and disabilities and prevent them from coming in the way of future growth. This has been stressed in the Sargent Report. Pre-Primary Education will have to deal mainly with two aspects which may be broadly called the physical and the educational. The first is no less important than the second. The Pre-Primary School will have to work in close cooperation with other institutions set up for Social Welfare for purpose of medical relief, health, nutrition, etc. If these institutions function as they should, in this manner—it is for us to ensure that they will—they will be performing a most essential and beneficial function.

5. Pre-Primary Education Essential for Compulsory Primary Education. When schemes for the expansion of Pre-Primary Education are mooted, the question may be asked whether in view of the fact that the scheme of universal, free and Compulsory Primary Education, with its heavy financial commitments has been undertaken, it would be advisable to embark on another scheme of Pre-Primary Education. This question formed one of the items in our questionnaire. The general opinion has been that the two questions should not be allowed to cross or conflict with each other. Adequate and satisfactory provision of Pre-Primary Education will itself be conducive to the effective enforcement of Compulsory Education and contribute to its success. We recall, in this connection, the observations made by Mrs. Durgabai Deshmukh at Tirupati in July 1960. She said, "Pre-Primary Education has a great bearing on Primary Education and is not a luxury." Incidentally, it will minimise the appalling "wastage" in Primary Education which has been the subject of many an educational report in the past.

6. Foundation Stage. It is well known that the age 3—6 is the most impressionable part of children's growth and that the foundations of future adult personality are laid in these impressionable years. Future social prejudices and social maladjustments are removed by the provision of a properly "controlled environment" for the children when they are at this stage. This is not to mean that there should be any kind of imposition of whatever kind on the plastic minds of the

children. But development cannot take place in a vacuum. There must first be an environment, and this should be thoughtfully built up to suit the child's physical and psychological needs. Only thus can a mentally healthy society be built up.

Why increasing emphasis on Pre-Basic Education? Till recently the child was only a future being. He was supposed to be a miniature of man. As Madame Montessori remarks he was not envisaged except as one 'who is to become' and therefore he was of no account until he had reached the stage in which he had become a man. The child was, therefore, forced to imitate man at the cost of his own personality....What was aimed at principally was that he should know how to imitate the adult, he was forced to suffocate the creative forces... He had to act in a manner which was not natural to children and should become natural to them only when they would be adults.

The social environment which we have created for ourselves is not suited to the child. Like all other human beings, he has a personality of his own. "He carries within him the beauty and dignity of the creative spirit"—*Madam Montessori*. His attainments are of a lower type and so he feels a sort of inferiority in him when he compares his attainments with those of others. Too much of dependence upon others is also a source of inferior sentiments. "Also in the family circle there is the same error of principle."—*Maria Montessori*.

He suffers on this account not only organically but also morally. It is this fundamental problem of education, the education of character that has been up to now neglected by the school. The present is never taken seriously into account. "...what the child needs in order to be able to live fully according to the physical needs of his age."—*Madam Montessori*. In most modern families, the physical life of the child has begun to be taken into consideration but the moral side is not even touched. It is all the more very dangerous that we think it our duty to suppress the feelings of the child which have an everlasting effect. In this suppression are hidden the fatal germs which we inject into the child resulting in the symptoms of moral illness leading to the formation of a society of corrupts.

At the same time, it is felt that most of the mental and emotional disturbances that arise in later childhood and adolescence owe their origin to maladjustment of children during the pre-school period. Child has certain traits of character. To find them out and provide for their better adjustment are more important for better mankind. Nature and nurture is both important for a harmonious development of the child. Child education is, therefore, the most important problem of humanity.

Development of the Idea. Influenced by the views of Rousseau, Pestalozzi and Froebel, etc., western countries have been taking a keen interest in the development of modern methods of educating the

child. The Kindergarten system and the Montessori Method are very popular methods today. America and Russia are getting ahead of other countries in this respect. Russia has included it in its national system of education.

In her book 'The Nursery Schools', Margarete McMillan explains the necessity of nurseries and nursery schools. "Nurseries and Nursery Schools are wanted because little children want nurses." Of course, it is correct but in Russia, nurseries have been opened because of the present developments in the economy of the country for which ladies are found in every sphere of life and when on work, women do not want their children to be left uncared for.

At the same time most of the mothers are not fit to give early education. It therefore, becomes very essential to establish nurseries or nursery schools for children between 3 and 6.

Aims of the Nursery Schools

According to Miss Grace Owen, the aims of these schools are six-fold :

- (1) To provide healthy external conditions for the children like light, sunshine, space and fresh air.
- (2) To organise a happy, healthy and regular life for the children as well as continuous medical supervision.
- (3) To assist each child to form for himself wholesome personal habits.
- (4) To give opportunity for the imagination and for the development of many interests as well as skills of various kinds.
- (5) To give experience of community life on a small scale where children of similar as well as varying ages work and play with one another day by day.
- (6) To achieve a real unity with home life.

The aim is the creation of a social environment, keeping the child in view, in which he may develop his physique and intellect. Co-operation and not competition is emphasised. Spontaneous activities lead to the emotional development. A love for work is developed and the child begins to find work in play and play in work. In short, Nurseries and Nursery Schools are the best refuge for the would-be-citizens of a country where there are provisions for a better social adjustment of the child.

The Objectives of Pre-Primary Education Stated by the Commission

1. **Development of Good Habits.** To develop in the child good health habits and to build up basic skills necessary for personal adjustment, such as dressing, toilet habits, eating, washing, cleaning, etc.

2. Development Desirable Attitudes. To develop desirable social attitudes and manners ; and to encourage healthy group participation, making the child sensitive to the rights and privileges of others.

3. Development of Emotional Maturity. To develop emotional maturity by guiding the child to express, understand, accept and control his feelings and emotions ;

4. Aesthetic Appreciation. To encourage aesthetic appreciation.

5. Stimulating Curiosity. To stimulate the beginnings of intellectual curiosity concerning the environment and to help him understand the world in which he lives ; and to foster new interest through opportunities to explore, investigate and experiment.

6. Encouraging Self-Expression. To encourage independence and creativity by providing the child with sufficient opportunities for self-expression ;

7. Speech Habits. To develop the child's ability to express his thoughts and feelings in fluent, correct and clear speech.

8. Physical Development. To develop in the child a good physique, adequate muscular co-ordination and basic motor skills.

Historical Background

Abbot and Wood Despatch (1936-37)

Speaking on the methods the Abbot and Wood, Despatch said, that "The education of the young children should provide.....for their physical care, for training them in good habits and for widening their experience through interesting activities. The infant schools must be sensible, happy institutions which patiently do something for the children which the home does not do but yet the parents appreciate when it is done.....We envisage such activities as acting and singing, drawing and making things." Through sensory training, through the promotion of self-expression, through community living and companionship in an educationally controlled environment the alround development of the child is fostered. The foundations are laid which cover all the aspects of growth and development and the young child is then ready to understand and grasp that education for citizenship which a well-planned basic school should impart.

The Second Kher Committee (1939) had also resolved to issue orders to the Provincial government to open nursery and infant schools to aim at :

(i) providing model infant and nursery schools at suitable centres;

(ii) increasing the supply of properly trained infant school teachers;

- (iii) encouraging the enrolment in basic schools of children below the minimum age for compulsory attendance; and
- (iv) stimulating the provision by voluntary agencies of efficient pre-basic schools.

The Sargent Report (1944)

"An adequate provision of Pre-Primary instruction in the form of Nursery Schools or classes is an essential adjunct to any national system of education. The provision in this respect at present is negligible." It recommended :

(1) In urban areas, where sufficient children are available within a reasonable radius, separate Nursery Schools or departments may be provided ; elsewhere Nursery classes should be attached to Junior Basic (Primary) Schools.

(2) Nursery Schools and classes should, invariably be staffed with women teachers who have received special training for this work.

(3) Per-Primary education should in all cases be free. While it may not be feasible to make attendance compulsory, no efforts should be spared to persuade parents to send their children to school voluntarily, particularly in areas where housing conditions are unsatisfactory and/or mothers are accustomed to go out to work.

(4) The main object of education at this stage is to give young children social experience rather than formal instruction.

Recommendations of the Education Commission (1964-66) on Pre-Primary Education

"While we recognise the need to develop pre-primary education as extensively as possible, our advance in this sector will necessarily be restricted on account of the inadequacy of the resources available, and especially because primary education must be accorded a higher priority. It is also necessary to reconcile the competing claims of quality and quantity. Some educationists are of the view that the pre-primary education to be provided must be of the proper quality and they insist on maintaining standards which increase the cost per pupil to a level where any large-scale expansion becomes impossible. Others deliberately advocate the adoption of less costly techniques so that the benefit of pre-primary education may be extended to a larger proportion of children. There are also differences of opinion regarding the agency of development : some would prefer the responsibility for pre-primary education to be largely assumed by the State while others would leave it mainly to private enterprise. In these circumstances, we shall have to take a pragmatic view and adopt a policy which promotes experimentation and the best utilisation and combination of existing resources and agencies.'

We make the following recommendations for the development of pre-primary education during the next 20 years :

1. State Level Centres for the Development of Pre-Primary Education. There should be State-level centre for the development of pre-primary education located in the State Institute of Education. In addition, a pre-primary education development centre should be established in each district in a phased programme spread over the next 20 years. The main functions of these centres would be to train pre-primary teachers, to provide supervision and guidance to pre-primary teachers working in the area, to hold refresher courses and in-service training programmes for them, to undertake the preparation of teaching aids out of the locally available materials, to conduct experimental pre-primary schools and to provide education to parents regarding child care. They can also advantageously undertake programmes of initial training of pre-primary teachers.

2. Private Enterprise in Pre-Primary Education. The establishment and conduct of pre-primary schools may be left, as at present mainly to private enterprise. The State should assist through grants-in-aid on a basis of equalisation. Accordingly, pre-primary schools catering to the needs of children from the under-privileged groups will have a higher claim on State funds.

3. Experiments. Every encouragement should be given to experimentation, particularly in devising less costly methods of expanding pre-primary education. We strongly commend the scheme recently adopted by the State of Madras. Under this programme, a local woman if selected as a teacher on a small honorarium, is given a short course of training, and is assisted in her work by the local Mahila Mandal. The outstanding features of the scheme are its low costs (the cost per child per year is less than Rs. 20) and its adaptability and suitability to rural areas...

4. Children's Play Centres. Another important experiment of this type, which has been tried with success in some parts of the country, is the establishment of children's play centres in close association with the primary school. These are conducted by a specially trained teacher in the primary schools, who is given an allowance for the purpose, or by a separate teacher. The programme, which lasts for about two hours a day, is simple and consists of group singing, story-telling and games, with considerable attention being given to personal hygiene and health. These centres serve as pre-school classes and smoothen the transition of the child from its play dominated world of infancy to the formal atmosphere of the primary school... Such centres should be attached to as many primary schools as possible.

5. Role of the State. The role of the State should be to maintain such centres at the State and district levels, train pre-primary teachers, conduct research, assist in the preparation of materials and literature needed for pre-primary education and provide supervision and guidance to pre-primary schools and training institutions....

6. Curriculum. We can hardly talk about a curriculum for

pre-primary schools ; it is more appropriate to think of it as a programme of activities. We agree with the suggestion of the Committee on Child Care (1961-62) appointed by the CSWB, that the programme should consist of the following activities :

(a) Play activities :

- (i) Free play including educational and constructional toys, indoor games, and outdoor activities in association with other children.
- (ii) Physical activities involving muscular and limb movement ;
- (iii) Play involving contact, acquaintance, imitation and experience of physical, family and social environment ;
- (iv) Organised play, group activities and directional play ; and
- (v) Playground activities using playground apparatus.

(b) Physical training including simple exercise, dance and eurhythmsics.

(c) Manual activities and play like gardening, simple chores and participation in simple community efforts.

(d) Sensorial education using natural objects and specially constructed apparatus.

(e) Handwork and artistic activities involving the use of finger skills and tools ; and activities like drawing, painting, singing, music and dancing.

(f) Learning activities including language ; personal hygiene and health rules ; elementary nature study involving contact with the physical, plant and animal world ; counting and arithmetic, etc.

(g) Self-service in school eliminating as far as possible the use of servants and adult helpers.

We have often found that the programmes tend to be rigid and authoritarian, that adequate opportunities are not given to children to know their environment, that group work tends to be emphasised at the cost of the children's needs, and that the educational possibilities of the provision of mid-day meals and snacks are not utilised fully. To overcome these, it is necessary to improve the training of teachers and to give them greater freedom in planning their programmes.

7. Co-ordination Among Agencies. There is need for more co-ordination among the different agencies that work for child-care and pre-primary education, both at the national and at the State levels. In particular, it is necessary for the State Education Departments to develop close relations with CSWB, the Indian Council of Child Welfare and the Community Development Administration.

Recommendations of National Seminar (1971)

The National Seminar on Primary and Work-Oriented Education which was also the Tenth National Seminar on Elementary Education, considered the role that pre-primary education could

play for the development of primary education in India. The following major considerations for the development of pre-primary education were accepted :

- (1) The majority of Indian children come from the disadvantaged homes. Pre-school education can compensate the poor home factor to a considerable extent.
- (2) The industrial and technological advancement has increased the number of working mothers. Pre-school institutions are needed to take care of their children.
- (3) Pre-school education can develop school readiness in children and can thus help to reduce wastage at the primary level.
- (4) Research studies indicate that early years (3 to 6) are the most crucial for the growth and development of the child.

The National Seminar made the following major recommendations :

- (1) The programmes of pre-school education should be closely related to the home and community environment of the child.
- (2) Since it would be difficult, under the present circumstances ; for the State Governments to provide for the quantitative expansion of pre-school education, it should be left to the care of voluntary agencies.
- (3) The voluntary agencies should develop less costly equipment with the help of indigenous materials, and should fully utilise community resources for the growth of pre-school education.
- (4) Following techniques should be used : employing retired personnel, introducing shift system in primary schools, engaging educated or semi-educated wives of primary school teachers, attaching pre-primary classes to primary schools and using mass media.
- (5) Primary school teacher training should include principles governing child care and pre-school education, so that the primary school teachers can look after pre-school programmes in mixed schools.
- (6) State Governments should provide funds for training teachers and supervisors for pre-primary education.
- (7) The State Institutes of Education should create special cells of pre-primary education and the NCERT could profitably undertake longitudinal studies so that misgivings about pre-primary education could get cleared.

It is clear that this area of education deserves consideration in its own right. The main hurdle in the way is the availability of adequate resources. Indeed, some more money and more time would be needed before a large number of good and healthy seedlings could be procured from the *Nurseries for School Gardens*.

Problems and Causes of Slow Growth of Nursery Education in India

1. Indifference of the Parents.
2. Poverty of the parents.
3. Costly nature of the existing nursery schools.
4. Lack of trained teachers.
5. Lack of good teaching methods.
6. Lack of State encouragement.
7. Lack of research.
8. Lack of cheap equipment.

Suggestions for Improving Pre-Primary Education in India

[Based on the Report of the Committee on Pre-Primary Education in Mysore State (1961)].

I. Curriculum

The following forms of activity should be provided :—

(a) **For developing Muscular Co-ordination and Health.** Outdoor activities, such as running and skipping round the fields ; climbing and sliding ; jumping ; balancing ; swinging ; imitative activities involving large-muscle movement ; rhythmic activities as part of musical experience in physical education ; other activities like throwing and catching, lifting, piling and moving hollow blocks.

(b) **Personal Health Activities and Activities for Developing Health Habits.** The object of these activities is to train the children to look after their personal hygiene with increasing independence in home and school and to develop permanent health habits. Cleaning hands, legs, nose and mouth ; combing the hair ; taking care of clothes are suitable activities.

(c) **Keeping Surroundings Clean.** Children enjoy activities such as sweeping, dusting, wiping, etc. To them it is more fun than work. The aim of these activities should be to train the children to evince interest in similar activities in the home and surroundings.

(d) **Sensory Training with Special Apparatus.** Activities for creative expression such as, drawing and painting ; clay work ; paper cutting, cutting pictures and pasting ; block building ; stringing beads and flowers ; digging earth.

(e) **Observation of Nature :** Observing plants, animals, birds

and natural phenomena ; collecting natural objects. These activities provide the foundations for scientific experience and also provide a means of language expression.

(f) **Language and Number Work.** The object is not to introduce the children to formal reading, writing and arithmetic but to provide experiences psychologically suited to the needs of children at this age, which will make them more fit, and 'ready' for the systematic and formal training in the Primary School. The activities should include : conversation, story telling and dramatisation for developing expression ; building up experiences about letters by means of their shapes, and sounds associated with them ; obtaining first experiences about number, shape, size and position by means of concrete objects and pictures.

(g) **The School Meal.** This should form an essential service not only from the point of view of nutrition but also from the point of view of social training through this activity. The simplest form of this is to make provision for a cup of milk during the session. It should be left to the Village Panchayats or the school managements to organise the service in the best manner possible.

II. Equipment

(i) Much of the equipment could be made locally, using locally available materials, and should be obtained in this way. In the training courses for teachers, the trainees should receive training in the making of articles of equipment themselves and also practical guidance in getting some of the articles made with the help of local artisans.

(ii) The Multi-purpose High Schools and Polytechnics should be encouraged to manufacture such of the articles of equipment for Pre-Primary Schools as could be brought under the schemes of practical work in their Carpentry and other sections. The possibilities in this regard should be examined by the Education Department and the Board for Technical Education.

(iii) 'Toy Banks' may be organised for the purpose of collecting useful toys for children in the Pre-Primary School.

(iv) Toy making should be introduced as a craft in Girls' High Schools.

III. The Two Sessions

Pre-Primary Schools should work in two sessions of three hours each per day. The children should be divided into two batches each batch attending one session. The actual timings may be decided according to local and seasonal conditions.

IV. Number of Children

There should be not more than 20 children in a group per teacher. The teacher should also have the assistance of a helper. As

the school will work in two sessions and 20 children will be taken on for one session and another 20 for the other, the staffing will be on the basis of one teacher and helper for 40 children.

V. Teachers

(i) Teachers for the Pre-Primary Schools should possess a general educational qualification corresponding to a pass at the S.S.L.C. and they should be trained. They should be given the same pay as teachers in Primary Schools possessing the same qualifications.

(ii) General educational qualification of the seventh standard should be prescribed for helper. The helpers should also be trained for their work in short courses. They should be selected with care. They should possess the requisite qualities for dealing with young children and this should be the criterion in selecting them.

VI. Buildings

(i) According to the scheme envisaged the items of non-recurring expenditure will have to be provided by the public, the Government grant covering the pay of the teacher and helper. It should be left to the people to decide on the type of the buildings they will have, subject to the broad requirements of a Pre-Primary Schools.

(ii) Simple structures will be adequate to suit the type of Pre-Primary School now envisaged. More costly and better buildings may be constructed, wherever possible. The low-cost structures have been suggested so that the question of cost of buildings may not loom large and come in the way of the spread of Pre-Primary Education facilities in the rural areas.

(iii) Different designs and plans at various cost levels suited to the special requirement of Pre-Primary Schools should be got prepared. This would require experimentation in some typical areas.

VII. Agency for Pre-Primary Education

(a) There should be a re-orientation in the schemes of Social Welfare for establishing Balwadis and running them on effective lines. The Pre-Primary School is an educational as well as a Social welfare agency. Concentration on the Balwadis will give more definite direction for Social Welfare work and yield tangible results.

(b) The agency for the organisation of the Pre-Primary Education should be the Social Welfare Board. This should be assisted by the Education Department in regard to educational supervision and guidance.

VIII. Board of Pre-Primary Education

A Board of Pre-Primary Education should be set up. It should be an expert Advisory Body. Its functions may be the following :—

(i) To advise the Government on schemes of expansion of Pre-Primary Education ;

(ii) To review the progress achieved in the schemes periodically with a view to ensuring that the outcome of the schemes undertaken has been satisfactory and that the benefits of the schemes have been evenly distributed over the State and to send a detailed report in this behalf to Government;

(iii) To advise the Government on the curriculum, equipment, building, staff and such matters taking note of the actual experience obtained in the course of the implementation of the scheme of expansion now proposed;

(iv) To advise the Government on matters relating to co-ordination between the several agencies engaged in Pre-Primary Education, such as the Social Welfare Board and Education Department etc.;

(v) To advise Government on measures to be adopted to make suitable books available to the children;

(vi) To study the conditions and requirements of schools by visiting typical schools in various areas of the State;

(vii) To advise Government on measures relating to the selection of teachers and their training; and

(viii) To advise Government in all matters relating to Pre-Primary Education referred to the Board.

IX. Grant-in-Aid

(a) There should be a set of uniform rules for grant-in-aid replacing the different rules now in force in the different areas of the States.

(b) The underlying principle of grant-in-aid is the sharing up of the responsibility between the private agencies and the Government. Considering practical conditions now obtaining, Government should give financial aid to the extent of the full pay of the staff. All non-recurring expenditure for buildings, equipments, etc., should be met by the private agency.

(c) Arrangements should be made for disbursing the salaries of the staff without delay.

X. Establishment of Pre-Primary Schools by the Government

While the establishment of Pre-Primary Schools by local bodies and other private agencies should be general pattern of expansion in this grade of education, the Government should also establish schools on its own—(i) to serve areas which are specially backward economically and educationally; and (ii) to function as demonstration centres in the rural areas.

XI. Books for Children

(a) Government should aid the publication of good books for children by means of subventions and the system of purchasing books

for being gifted to schools. It will not be possible for private authors to bring out good children's books without financial assistance from Government. Government may also take over the publication of good books on suitable terms with the authors.

(b) There should be an anthology of existing books suitable for children below the age of 6. This anthology should be prepared by an expert body. As fresh books come up, they may be added to the list. Great care must be exercised in the selection of books which will be picture books in the main for the use of children in their impressionable years.

XII. Pre-Primary Schools Teachers' Association

It is desirable to have a State-wide Association of Pre-Primary School teachers with the object of pooling practical experience in the running of schools, especially in the rural areas and to develop the professional side of the teachers' work. The teachers should be encouraged to form themselves into such an Association. If a Board for Pre-Primary Education comes into existence, a convention of teachers may be convened by the Board for drawing up a constitution and defining its functions, and to consider other problems relating to the practical implementation of the new policy of Government.

XIII. Statistics

A survey of children's education should be made covering the whole country so as to collect full information about the several agencies working in the field of the education of children between the ages of 3 and 6, number of schools, strength, etc.

Future Expansion of Pre-Primary Education

The Commission hopes to cover 5% of the children in the age-group of 3 to 5 (*i.e.* 2·5 million) and 50% in the age-group of 5 to 6, by 1986. It is worth mentioning that the Fourth Five-Year Plan (1969-74) confines its efforts mainly to certain strategic areas of pre-school education such as training of teachers, evolving suitable teaching techniques and production of teaching materials and teachers' guides. There is, however, a small provision for the opening of *balwadis*, both in rural and urban areas.

Present Position of Expansion of Pre-Primary Position.

The available statistics show that the pre-primary education has been rapidly gaining in popularity after Independence. In 1950-51, there were 303 pre-primary schools (including 28 in rural areas) with 866 teachers and 28,309 students. The total direct expenditure on these schools came to Rs. 1·2 million or 0·1 per cent of the total educational expenditure. In 1965-66, the number of schools rose to 35,00 with 6,500 teachers, and about 2,50,000 students. The total direct expenditure rose to Rs. 11 million or 0·2 per cent of the total educational expenditure. The Central Social Welfare Board and the Community Development Administration have also advanced the cause of pre-

primary education by running about 20,000 *balwadis* with a total strength of 6 lakhs. The progress is significant over earlier achievements, but as compared to the development of education as a whole, pre-primary education takes a niggardly position. In 15 years, rise in percentage of expenditure on pre-primary level to the total educational expenditure has been only 0·1.

Nursery Education in Punjab (1969-70)

Punjab Lacks Good Nursery Schools

The setting up of good nursery schools in cities and big villages of Punjab has been suggested by the Department of Education and Community Services of Punjabi University, Patiala.

The department, which undertook a study of nursery education in the State, has also suggested a detailed survey of nursery schools run by private agencies.

According to it most of the nursery schools in the State had become commercial centres where young untrained teachers were exploiting and children subjected to the rigours of meaningless instruction.

The tempo of nursery education in the state, it says was towards the negative direction as the number of State-owned nursery schools had decreased from 11 in 1963-64 to three in 1969-70. Taking advantage of the lukewarm attitude of the State Government, private agencies had opened a number of nursery schools or attached nursery classes to their primary schools. Their number had risen to about 100 and nearly 8,000 children received instruction in them.

It said only good schools should be recognised and no school should be allowed to function without the State Government's approval.

School Wastage and the Need for Pre-School Education

The problem of wastage and stagnation in the primary school with which we are faced on a vast scale, is closely related to the availability of pre-school education. Unless the child is physically, emotionally, intellectually and socially prepared to cope with the challenges of school life he is likely to fall by the wayside. Development of the necessary cognitive abilities and skills, social and emotional maturity and physical health are all part of the pre-school programme.

A great deal of the present investment in primary and secondary education brings no return because of the lack of such preparation. Some recent researches in the U.S. for example, have shown that children from the underprivileged section of the community (and without benefit of pre-school education) lag 20 per cent behind in achievement compared to those from more privileged homes, who have had the benefit of pre-school education, when they enter class I. This gap widens to 40 per cent by the age of eight (Class III) and becomes between 60 and 80 per cent by the age of ten (Class V). Naturally, these students account for school drop-outs and related problems.

Primary or Elementary Education

Meaning and Scope of Compulsory Primary Education. This refers to the period of schooling during which every child must remain in school. Today most of the countries of the world require students to attend school for a number of years. School leaving age varies in many countries. There are numerous cultural, economic, geographic, educational, social, religious and political barriers to the enactment and enforcement of compulsory education laws in many countries. In India the desire for compulsory education figured in the writing and speeches of our leaders from about 1840. In 1882, witnesses before the Hunter Commission vainly asked for the introduction of compulsory education and in 1912 Gokhale boldly brought a bill for compulsory education only to be thrown out. It was only after the Independence that it became possible to insert Article 45 in the Indian Constitution stating "the State shall endeavour to provide free and compulsory education for all children up to the age of fourteen years within ten years from the date on which the Constitution comes into force".

Objectives of Primary Education. The Regional Meeting of Representatives of Asian Member States on Primary and Compulsory education held at Karachi in December 1959 and January 1960 suggested that the objectives of primary education should be :—

- (a) To give an adequate mastery over the basic tools of learning ;
- (b) To bring about a harmonious development of the child's personality by providing for his physical, intellectual, social, emotional, aesthetic, moral and spiritual needs ;
- (c) To prepare children for good citizenship, to develop in them a love for their country, its traditions and its culture, and to inspire in them a sense of service and loyalty ;
- (d) To develop international understanding and the spirit of universal brotherhood ;

- (e) To inculcate a scientific attitude ; . . .
- (f) To inculcate a sense of the dignity of labour ; and
- (g) To prepare children for life through the provision of worthwhile practical activities and experiences, including work experience.

Compulsory Education in India—A Brief History

Shri J. P. Naik describes the history of compulsory education in India in an article published in the Seminar Issue (1961) of the Indian Journal of Educational Administration and Research as :—

“The desire for compulsory education began to find expression in the writings and speeches of our leaders from about 1840. Even some of the progressive officers of Government wrote about and discussed plans of education, including that of compulsory provision of schools or compulsory enforcement of attendance. But the idea hardly gathered any momentum till 1882 when a number of witnesses before the Hunter Commission asked for the introduction of compulsory education. They were no doubt impressed by the Compulsory Education Laws passed in England in 1870 and 1880. But the Hunter Commission naturally brushed all such talk aside as fantastic and did not even care to discuss the problem. By the turn of the century, however, conditions had changed very greatly. The rise of Japan had a tremendous effect upon the people. The Congress was now active and the public awakening was immensely greater. So Gokhale was emboldened to bring a bill for compulsory education in the Central Legislature in 1912. Unfortunately but not unexpectedly, it was thrown out, partly because it was premature and partly because the British Government was not prepared to accept the responsibility. It was again the impact of the First World War and the withdrawal of British authority, by transfer of education to elected Ministers in the Provinces in 1921, that made the acceptance of the principle possible. The Indian Ministers could now do what an Indian Prince like Maharaja Gaikwad had already done for his State in 1893—they passed laws of compulsory attendance and enforced them in a few areas on an experimental basis. But this could not meet the growing national demand and the agitation continued. Forced to accept the principle, the British Government changed its tactics and began to plead that, on administrative and financial grounds, it would not be possible to introduce compulsory education for several years to come. The final victory in the struggle, therefore, was only achieved after the attainment of Independence and the concrete proof of this victory was the insertion of Article 45 in the Constitution—‘the State shall endeavour to provide free and compulsory education for all children up to the age of fourteen years within ten years from the date on which the Constitution comes into force’—the supreme embodiment of a national struggle spread over a hundred years in the past and of its most cherished hope for all time to time.”

Unprecedented Expansion of Primary Education in India

<i>Age Group</i>	<i>1946-47</i>	<i>1971-72</i>	<i>Increase</i>
6-11 (Classes I to V)	About 14 Million or about 35% of the age-group	About 63 million or about 83% of the age- group	$4\frac{1}{2}$ times.
11-14 (Classes VI to VIII)	About 2 Million or about 9% of the age-group	About 15 million or about 37% of the age- group	$7\frac{1}{2}$ times.

The progress made in the development of elementary education during the last 25 years has been literally fantastic. The number of elementary schools has increased from 2·8 lakhs to 6 lakhs and we have now a primary school within easy walking distance from the home of every child. The enrolments in Classes I-V have increased from 14 million (or 35 per cent of the age-group 6-11) in 1946-47 to 63 million (or 83 per cent of age-group) in 1971-72. In classes VI-VII, they have increased from two million (or 9 per cent of the age-group 11-14) in 1946-47 to 15 million (or 37 per cent of the age-group) in 1971-72. The expenditure on elementary education has increased during the same period, from about Rs. 25 crores to about Rs. 330 crores. Unfortunately wastage and stagnation rates still continue to be high and, therefore, literacy has increased only from 14 per cent to 29 per cent. In spite of this, it is obvious that the tremendous progress of elementary education in the post-independence period is unparalleled in the earlier educational history of our country and has only a few parallels in the contemporary history of other developing countries. There is, therefore, every reason for us to feel proud of what we have been able to achieve.

Problems of Elementary Education and Recommendations of Ten National Seminars on Elementary Education (1961-1970)

The National Seminars on elementary/primary education have discussed problems of primary education and made valuable recommendations for its improvement in the country. The first National Seminar was organised by the Ministry of Education in 1961 and the tenth in 1970. A review of the deliberations of these seminars focus our attention on the following problems :—

Problems

1. Balwadis and their Organisation.
2. Basic Pattern.
3. Co-education.

4. Compulsory primary Education Legislation.
5. Curriculum Development.
6. Educational Cess.
7. Educational Expenditure.
8. Girls' Education.
9. Headmasters.
10. Local Bodies and Local Communities and their Role.
11. Mid-day Meals.
12. Model Schools.
13. Norms for Primary Schools.
14. Part-time and continuation Classes.
15. Perspective Plan.
16. Scheduled Castes and Backward Classes' Education.
17. School Health.
18. School Complexes.
19. School Building.
20. School Improvement Programmes.
21. School Library.
22. Science Education.
23. Supervisory Staff.
24. Teachers.
25. Teacher Education.
26. Text-books.
27. Wastage, Stagnation and Evaluation.
28. Work Experience.

Recommendations

1. Balwadis

- (i) Education departments of the States may take up the question of granting recognition to the Balwadis particularly in the rural areas (Third Seminar, 1963).
- (ii) Training courses of short duration may be arranged for teachers working in Balwadis (Third Seminar, 1963).
- (iii) Balwadis and creches may be attached to primary schools (Seventh Seminar, 1967).

2. Basic Pattern

- (i) All Primary Schools may be converted to the basic pattern during the Fourth Five Year-Plan (Fifth Seminar, 1965).
- (ii) Basic Schools should be strengthened (Sixth Seminar, 1966).

3. Co-education

- (i) Public opinion may be created for co-education (Fifth Seminar, 1965).
- (ii) Provision for sanitary blocks for girls should be made in all co-educational schools (Seventh Seminar, 1967).
- (iii) Provision for the appointment of school mothers may be made where possible (Seventh Seminar, 1967).

4. Compulsory Primary Education Legislation

In States where legislation for compulsory education has not been enacted, it should be done without delay (Fifth Seminar, 1965; Sixth Seminar, 1966).

5. Curriculum Development (See Chapter Curriculum)

- (i) Suitable machinery for curriculum development may be set up in all the States. (Ninth Seminar, 1969).
- (ii) The tendency of giving predominance to university teachers in the preparation of curriculum may be substituted by giving a major role to working teachers of the schools. Ninth Seminar, 1969).
- (iii) In-service and pre-service training courses may be organised to acquaint the teachers with the changes in curriculum from time to time (Ninth Seminar 1969).

6. Educational Cess

- (i) Some kind of educational cess is necessary (Fifth Seminar, 1965).
- (ii) Village communities may be authorised to levy taxes (First Seminar, 1961).

7. Expenditure

- (i) At least 20% to 25% of the State revenues should be allocated for education (Fifth Seminar, 1965).
- (ii) At least 50% of the allocated budget for education should be spent on elementary education (Fifth Seminar, 1964 ; Sixth Seminar, 1966).
- (iii) Funds available for elementary education may not be diverted to any other field of education (Ninth Seminar, 1969).
- (iv) Local bodies should explore the sources of revenues fully for primary education (Tenth Seminar, 1970)

8. Girls' Education (Discussed in detail in this chapter)

- (i) Stipends and scholarships may be given to girls for attendance (Fifth Seminar, 1965).

- (ii) Emphasis may be laid on supply of free text-books and uniforms to the girl students (Seventh Seminar, 1967).
- (iii) Children of the poor families may be encouraged to do craft work, etc. for making some earning (Seventh Seminar, 1967).
- (iv) Qualified women teachers may be appointed (Seventh Seminar, 1967).
- (v) Provision for sanitary blocks for girls should be made in all co-educational schools (Seventh Seminar, 1967).
- (vi) Provision for part-time and continuation education may be made for girls (Seventh Seminar, 1967).
- (vii) The importance of girls' education should be emphasised through radio talks, feature films and other audio-visual means in areas where large number of girls are not attending schools (Seventh Seminar, 1967).
- (viii) The curriculum for girls should be such as would fit them for various walks in life (Seventh Seminar, 1967).

9. Headmasters

As far as possible the headmasters of middle schools should be trained graduates with experience of teaching in primary schools (Seventh Seminar, 1967).

10. Local Bodies and Local Communities (Also see Chapter "*Constitutional Provision and Role of Local Bodies*").

- (i) The local bodies should explore the sources of revenue fully for primary education (Tenth Seminar, 1970).
- (ii) Village communities may be associated with the task of constructing school buildings (First Seminar, 1961 ; Second Seminar, 1962 ; Seventh Seminar, 1967).
- (iii) Village Communities may be approached for providing land for school gardens and play-grounds (Second Seminar, 1962).
- (iv) Community support may be secured for providing school uniforms, meals, text-books, writing materials, water facilities and school equipment (Second Seminar, 1962 ; Fifth Seminar, 1965).
- (v) School betterment programmes through public cooperation may be started in all States (Ninth Seminar, 1969).

11. Mid-Day Meals

- (i) School help programmes especially mid-day meals may be made as an integral part of each school programme (Sixth Seminar, 1966).

- (ii) School feeding programme may be started in all the institutions and production of indigenous nutrition materials like 'Balahar' may be undertaken on a regular basis (Ninth Seminar, 1967).

12. Model Schools

- (i) Efforts may be made to develop some selected schools in each State as models (Sixth Seminar, 1966).
(ii) Each Inspector should have a demonstration school in his area where purposive attempts at all round development may be made (Seventh Seminar, 1967).

13. Norms for Primary Schools

- (i) Norms about the requirements of primary and middle schools should be prepared by the Ministry of Education on all India Basis and States may adopt these norms with suitable modifications (Fourth Seminar, 1964).

14. Part-Time and Continuation Classes

Provision for part-time and continuation classes may be made for girls (Seventh Seminar, 1967).

15. Perspective Plan

State departments should prepare plans for their respective areas. (Second Seminar, 1962, Third Seminar, 1963).

16. School Building Corporation

School Buildings Corporation may be set up (Fourth Seminar, 1964; Sixth Seminar, 1966).

17. Scheduled Castes and Scheduled Tribes' Education. Discussed in detail in this Chapter).

- (i) Attempts may be intensified for meeting the needs of weaker sections of the community, viz., Scheduled Castes and Scheduled Tribes (Fourth Seminar, 1964; Ninth Seminar, 1969).
(ii) Tribal children may be taught through the medium of their mother tongue as far as possible (Seventh Seminar, 1967).
(iii) Establishment of residential schools in these areas may be encouraged (Seventh Seminar, 1967).
(iv) A higher rate of per capita expenditure should be incurred on their education (Sixth Seminar, 1966).
(v) Tribal languages/dialects may be given due place in the syllabi (Sixth Seminar, 1966).
(vi) Special incentives like stipends, scholarships may be given to enrol more students of tribal people (Fifth Seminar 1965; Seventh Seminar, 1967).

- (vii) Special allowance may be given to teachers working in the tribal areas (Fifth Seminar, 1965 ; Seventh Seminar, 1967).
- (viii) Tribal teachers may be appointed wherever available (Seventh Seminar, 1967).
- (ix) Educational qualifications for such teachers may be relaxed (Seventh Seminar, 1967).
- (x) Work load of the inspectors of these areas may be reduced (Seventh Seminar, 1967).

18. School Health

A survey of programmes for school health education as current in various States may be undertaken by the Ministry of Education and Youth Services (Ninth Seminar, 1969).

19. School Complexes

- (i) School complexes should be developed (Seventh Seminar, 1967; Ninth Seminar, 1969).
- (ii) School complex may be tried as a pilot project (Eighth Seminar, 1968).

20. School Improvement Programmes

School better programmes through public cooperation may be started in all States. (Ninth Seminar, 1969).

21. School Library

Provision for a library may be made in each school (Sixth Seminar, 1966).

22. Science Education

- (i) Elements of Science should be taught from the very first years (Sixth Seminar, 1966).
- (ii) The provision of a science room for each primary school should be made (Sixth Seminar, 1965).
- (iii) A minimum of Rs. 500 be made available to each school for the purchase of equipment of science (Sixth Seminar, 1966).
- (iv) A phased programme of supply of minimum equipment to each school may be undertaken (Seventh Seminar, 1967).
- (v) N.C.E.R.T. may be requested to provide its science kits to the schools to meet their needs of science equipment (Ninth Seminar, 1969).
- (vi) Science Workshops may be established in all the States to manufacture these kits for their schools (Ninth Seminar, 1969).

23. Supervision/Inspecting Staff

- (i) Seminars for inspecting staff may be arranged (Fourth Seminar, 1964).
- (ii) Supervisory facilities may be improved (Fifth Seminar, 1965).
- (iii) Work load of inspectors may be reduced (Fifth Seminar, 1965).
- (iv) The Inspectors of school should not be entrusted with more than 40-50 schools with a ceiling of 200 teachers (Eighth Seminar, 1968 ; Ninth Seminar, 1969).
- (v) All the schools should be inspected at least once a year followed by at least one more improvement visit. (Eighth Seminar, 1968).
- (vi) The inspectors of schools should follow modern practices of supervision (Eighth Seminar, 1968).
- (vii) The inspector of Schools should issue materials and guide books for teachers (Eighth Seminar, 1968).
- (viii) The inspector should conduct in-service courses (Eighth Seminar, 1968).
- (ix) Inspector of schools should be a trained person (Eighth Seminar, 1968).
- (x) Each inspector should undergo an induction course of 4 weeks' durations (Eighth Seminar, 1968).
- (xi) At least 3% of the total expenditure on education should be spent on inspection and direction (Ninth Seminar, 1969).
- (xii) Panel inspection should be attempted to as large an extent as possible (Ninth Seminar, 1969).
- (xiii) Programme of close supervision of schools should be instituted to provide guidance to teachers (Tenth Seminar, 1970).

24. Teachers

(a) Teacher Training

- (i) Training facilities for teachers may be expanded and the back log of untrained teachers may be cleared by training them. (Fourth Seminar, 1964; Sixth Seminar 1966).
- (ii) The topic of community development should be introduced in the syllabus of teacher training institutions (Third Seminar, 1963; Fourth Seminar, 1964).
- (iii) Correspondence courses for training of teachers may be introduced (Fourth Seminar, 1964; Sixth Seminar, 1966; and Seventh Seminar, 1967).

- (iv) Programmes of the State Institutes of Education may be developed (Fourth Seminar, 1964; Seventh Seminar, 1967).
- (v) The training courses should not be less than two years duration (Sixth Seminar, 1966; Seventh Seminar, 1967; and Eighth Seminar, 1978).
- (vi) The quality of training institutions may be improved (Fourth Seminar, 1964).
- (vii) Candidates securing 50% or more marks at the matriculation level should be attracted to the training colleges. Relaxation should be made for women, Scheduled Castes and Scheduled Tribes and backward and remote areas (Ninth Seminar, 1969).
- (viii) The trainees may be given a stipend of Rs. 40 per month (Seventh Seminar, 1967).
- (ix) Minimum qualification for admission to the training institutions should be matric or its equivalent (Seventh Seminar, 1967; Eighth Seminar, 1968).
- (x) The optimum number of trainees in any training institution should be 200 (Seventh Seminar, 1967).
- (xi) The programme of practice teaching in the training schools should be reoriented so as to meet the emerging needs of primary schools (Seventh Seminar, 1967).
- (xii) Comprehensive training colleges may be started as pilot projects (Seventh Seminar, 1969).
- (xiii) The training colleges should undertake extension work in the primary schools in the neighbourhood (Seventh Seminar, 1967).
- (xiv) The teacher training institutes should introduce trainees to the concept of work experience thoroughly (Seventh Seminar, 1967).
- (xv) Universities should be associated with S.I.E.'s (Eighth Seminar, 1968).
- (xvi) State Institute of Education and N.C.E.R.T. should prepare suitable literature on teacher education (Eighth Seminar, 1968).
- (xvii) Alumi Associations may be formed (Eighth Seminar, 1968).
- (xviii) Training Colleges should establish closer relationships with schools in the neighbourhood (Eighth Seminar, 1968).
- (xix) S.I.E.'s should organise correspondence course in teacher training to clear the backlog of untrained teachers (Eighth Seminar, 1968).
- (xx) S.I.E.'s should bring out modified versions of curricular development by N.C.E.R.T. (Eighth Seminar, 1968).

(b) In-Service Education

- (i) The Ministry of Education should introduce a centrally sponsored scheme for establishing an institution for providing in-service training (Second Seminar, 1962).
- (ii) Advance increments may be given to teachers for acquiring additional qualifications (Eighth Seminar, 1968).
- (iii) Suitable in-service training courses should be developed to improve the competency of teachers (Tenth Seminar, 1970).

(c) Facilities to Teachers

- (i) Quarters should be provided to teachers in the rural areas (Fifth Seminar, 1965).
- (ii) House rent allowances should be given to teachers in lieu of quarters (First Seminar, 1961).
- (iii) As far as possible husband and wife may be posted at the same station (First Seminar, 1961).
- (iv) Emolument of teachers may be increased (Fourth Seminar, 1964; Fifth Seminar, 1965).
- (v) Improvement in the salary scale of teachers and headmasters as recommended by the Education Commission may be made (Seventh Seminar, 1967).
- (vi) Teachers may not be overburdened with odd jobs (Seventh Seminar, 1967).
- (vii) Advance increments may be given to teachers for acquiring additional qualification (Eighth Seminar, 1968).

(d) Women Teachers

- (i) Quarters should be constructed for women teachers (Second Seminar 1962; Fifth Seminar, 1965; and Seventh Seminar, 1967).
- (ii) Women teachers may be provided orientation training in the rural areas in community development (Third Seminar, 1963).
- (iii) Preparation of women teachers may be accelerated (Fourth Seminar, 1964).
- (iv) Women teachers posted to remote areas may be given special allowances (Seventh Seminar, 1967).

25. Teacher Educators

- (i) Two courses of one-month duration—each may be organised for teacher educators during vacations (Third Seminar, 1963).
- (ii) Seminar of three days' duration for Principals of Training Colleges may be organised in the middle of the Session (Third Seminar, 1963).

- (iii) Teacher educators working in primary training institutions should be given a better status (Seventh Seminar, 1967).
- (iv) Emphasis may be laid on appointing teacher educators with a minimum qualification of a Masters' degree (Seventh Seminar, 1967).

26. Text-Books

- (i) Text-books may be nationalised in each State (Seventh Seminar, 1967).
- (ii) Various text-books developed by the NCERT should be adapted or adopted by various States (Eighth Seminar, 1968).
- (iii) Printing of text-books should be given to Text-Books Bureaux established by State Governments and the Staff of S.I.E.'s be associated with it (Seventh Seminar, 1971; Eighth Seminar, 1968).
- (iv) Teachers should be given incentives to write supplementary and *colateral reading materials in all subjects* (Eighth Seminar, 1968).

27. Wastage and Stagnation and Evaluation. (Discussed in detail in this Chapter).

- (i) Efforts may be made to reduce wastage and stagnation in elementary schools (Sixth Seminar, 1966).
- (ii) Improvement in equipment may be made for arresting wastage and stagnation (Seventh Seminar, 1967).
- (iii) Grades I to III may be treated as one ungraded unit (Seventh Seminar, 1967).
- (iv) School complexes should be formed (Seventh Seminar, 1967).
- (v) Beautification of the school should be done for arresting wastage (Seventh Seminar, 1967).
- (vi) Pilot Projects for reducing wastage and stagnation may be started in all the States (Ninth Seminar, 1969).
- (vii) Mid-day meals, supply of free text-books, uniforms and stationery may be provided to children as incentives for enrolment and retention (Ninth Seminar, 1969).

28. Work Experience

- (i) Work experience programmes may be oriented and attached to the industries and crafts available in the neighbourhood of the school (Seventh Seminar, 1967).
- (ii) Steps should be taken for providing work experience in all the schools, which should be socially meaningful and realistic (Tenth Seminar, 1970).

Elementary Education and Population Control

Commenting on our failure to fulfil the constitutional provisions regarding free compulsory primary education, 'The Hindustan Times' observed in an editorial dated 5th July, 1971.

"The problem has another aspect. It can be viewed as one more demonstration of the urgent need for population control. Educating an ever-increasing flood of children is even more difficult than feeding them. The food problem can—and is being—overcome by new agricultural techniques that can multiply production. There is no such quick formula for education. The number of children that can be taught will always be directly proportionate to expenditure on training teachers and expanding school facilities. Any relaxation in the family planning drive due to increased food production would, therefore, betray a total confusion of priorities."

Some Problems Discussed in Detail

Equalisation of Educational Opportunity

The Fourth National Seminar or Compulsory Primary Education (1964) suggested the following :—

While reviewing the progress of enrolment of children in elementary schools in all the States it was found that some States (such as Bihar, Andhra Pradesh, Madhya Pradesh, Rajasthan, etc.) were lagging far behind the national targets and were also unable to reach the targets prescribed in their own Third Plan. Even in the advanced States, where overall enrolment had been satisfactory, low enrolments were observed in respect of girls, scheduled castes and tribes and in the backward tracts. It was also found that the advanced areas and States had progressed at a greater pace than the backward areas or States. In certain States, the very low enrolment of girls had become a problem. In all States, some districts had advanced whereas others were lagging behind. Similarly, even in the same district, there were differences in the provision of educational opportunity in different Community Development Blocks. The problem of inequality of educational opportunity may be considered at several levels and with reference to different sections of society as follows :

- (i) Inequality that exists between one State and another ;
- (ii) In a State, the prevailing inequality between one district and another ;
- (iii) In a district, unequal educational opportunity in different areas ;
- (iv) Inequality of educational opportunity between boys and girls ; and
- (v) Inequality of educational opportunity that now prevails between the different sections of society ; advanced castes vs. scheduled

castes and scheduled tribes, upper and middle classes *vs.* lower classes, economically better off classes *vs.* poorer sections, etc.

After recognising this prevailing inequality of educational opportunity at different levels and between different sections of society, the members of the seminar tried to analyse its causes. On the basis of the experience reported in the different States, the following causes which now tend to create inequality of educational opportunity were listed :

1. Varying economic conditions. Some States were economically advanced while others were lagging behind. Consequently, the income per head of population in different States varied considerably. The same is true of district, block and local levels.
2. Social and psychological reasons, e.g. apathy towards girls' education, particularly in socially backward groups of people.
3. Varying literacy levels in States, districts, and localities.
4. Existence of inaccessible and isolated small habitations particularly in hilly and forest areas.
5. Varying occupational opportunities prevailing in different areas.
6. Lack of suitable and adequate accommodation for running schools.
7. Dearth of suitably qualified teachers ; particularly women teachers and teachers for tribal areas.

Educational Survey

The Group felt that an intensive study of the causes for educational backwardness be made at different levels. A special study of backward areas and groups of people should be made in this survey. Special staff (as in the 1957 survey) should be given to conduct these surveys under the auspices of State Institute of Education.

(a) **National Level Study.** At the national level, several criteria may be adopted for determining the extent of inequality of educational opportunity as between one State and another.

- (1) Achievement with reference to the targets set at the end of the third plan ;
- (2) Expenditure per head of population on elementary education ;
- (3) Annual recurring cost per pupil ;
- (4) Percentage of education budget to the total budget of the State and the percentage of budget for elementary education to the total education budget ;
- (5) Total number of non-attending children in the age-groups 6-11 and 11-14 and their percentage to the total popula-

tion in the above age-groups (to be given separately for boys and girls) ;

- (6) Percentage of graduates and matriculates to the total number of teachers ;
- (7) Percentage of children of scheduled tribes and scheduled castes and other backward classes actually enrolled to the total number of children enrolled in the age-groups 6-11 and 11-14.
- (8) Percentage of trained teacher to the total number of teachers ;
- (9) Percentage of scheduled tribes and scheduled castes and other educationally backward classes to the total population.

(b) **State Level.** At this level the Group recommends the following aspects for study :

- (1) Percentage of non-attending children district-wise in the age-groups 6-11 and 11-14 ;
- (2) Percentage of school-going children to total population in different age-groups (6-11 and 11-14) ;
- (3) Expenditure on elementary education per head of population district-wise ;
- (4) Number of schoolless villages with population of less than 300 and having no school within a radius of 1 k.m. Ratio of total population of such villages to the total population of the District ;
- (5) Total number of trained teachers and percentage of trained teachers to the total number of teachers ;
- (6) Number of matriculate teachers as against the total number of teachers and their percentage ;
- (7) Population and percentage of students of all secondary schools ;
- (8) Population and percentage of scheduled castes in the district ;
- (9) Ratio of urban to rural population ;
- (13) Teacher-pupil ratio ;
- (11) Number of incomplete elementary schools in the district ;
- (12) Number of complete elementary schools in the district ;
- (13) Number of single-teacher schools and plural-teacher schools ;
- (14) Number of middle schools in comparison with the number of elementary schools ;
- (15) Number of secondary schools to the total number of middle schools ;

- (16) Percentage of scheduled caste and scheduled tribe children and other backward classes attending schools to the total enrolment in different age-groups (6-11, 11-14 and 14-17);
- (17) Extent of wastage and stagnation at all stages;
- (18) Percentages of literacy;
- (19) Data bearing upon the economic life of the people;
- (20) Any other special factors that promote or impede the spread of education.

(c) **District Level Study.** The Group recommended that studies of each Taluka/Tehsil/Block be also conducted by the district educational officers and Zila Parishads keeping in view the same aspects as are enumerated above for State level study.

Effective and deliberate steps to be taken in the Fourth Five-Year Plan for bringing about Equality in Educational Opportunity

The financing of Elementary Education where equality of opportunity is to be achieved without delay should be separated from financing of other sectors of education and treated on a special footing. Special financial assistance be given to all States on the Principle of Equalisation in order to enable them to fulfil the directive of Article 45 of the Constitution. While adopting this principle, the Equalisation Authority should consider both developmental and committed expenditure on elementary education. The extent of State effort and the quantum of assistance from the Centre should both be decided by the Equalisation Authority i.e., the Central Government while equalising at the State level. Similar principles should be adopted by the State when equalising at the District level and by the District, when equalising at the local level.

I. Targets and Aims

The following specific steps should be taken and targets achieved during the Fourth Plan period :

1. All advanced States should achieve at least 110 percent enrolment for boys in the age-group 6-11 and 80 per cent for the girls in the same age-group.
2. All backward States should achieve targets of 100 per cent for boys and the minimum of 60 per cent in case of the girls in the age-group 6-11.
3. Special steps may be taken to bring in at least 60 per cent of non-attending children of the scheduled castes, scheduled tribes and other backward classes to schools during the Fourth Plan.
4. At least 60 per cent of non-attending children of the rural areas may be enrolled in schools during the Fourth Plan period.

In respect of education of children in the age-group 11-14, wide variations are observed from State to State. Only 32·3 per cent of children of the age-group 11-14 are attending schools and for girls, the percentage is only 18·2. Special efforts have to be made by the backward States to step up the enrolment of the boys and girls of the above age-group.

The following special programme to attain targets is recommended :—

1. Free distribution of mid-day meal to the poor and needy children.
2. Supply of free text-books and clothing to the poor children.
3. Directives may be issued by the Centre to backward States to concentrate on the clearance of the backlog of non-attending boys and girls.
4. Setting up of School Improvement Committees for undertaking intensive drive for bringing non-attending children to schools and also to see to it that enrolled children are retained in schools. Where School Management Committees already exist, they may be entrusted with this task.
5. Steps may be taken to enforce attendance, at least to the extent of issuing warning notices and attendance orders to the parents of defaulting children.
6. Whenever necessary, the prescribed teacher-pupil ratio may be relaxed while sanctioning new schools and additional teacher units in backward areas.
7. Provision of part-time schooling may be arranged for those children who are unable to attend regular schools.
8. Intensifying social education programmes in backward areas and among socially backward groups of people for educating the parents.
9. Special targets may be fixed for enrolment by the State Government from year to year for each district ; greater attention being paid to backward districts and areas.
10. Separate targets for the enrolment of children of groups of backward classes may also be fixed at State and District levels.
11. It may be made obligatory for teachers to stay in the vicinity of the school as far as possible. As an incentive, payment of rural accommodation allowance to teachers of rural areas who live within the vicinity of the school, may be considered.
12. Suitable facilities may be given to the children of rural elementary school teachers studying in high schools.
13. Residential type of schools (Ashram Schools) may be established for children of teachers working in very backward area and the full cost of their education may be borne by the Government.

14. Liberal Attendance Scholarships for boys and girls of backward classes may be provided and these should be paid regularly.

Measurement of the Extent of Progress Achieved. For this purpose, it is recommended that there shall be constant and regular periodical assessment of the achievement of the targets at different levels.

National Level. At the National Level, the continuance of the National Seminars for the appraisal of the progress achieved in each State is very essential.

State Level. At the State Level, half-yearly Seminars of Educational Officers working at the District Level may be held and the State Level Officers may participate in it. The final Seminar may be held before the National Seminar.

District Level. At the district level, there should be quarterly meetings of inspecting officers for appraising the achievements in the different Taluks/Blocks.

Taluk/Block Level. At this level, constant appraisal of achievements of individual schools should be made. Monthly review of the strength and attendance of each school should be made by the inspecting officer of the concerned Block or Taluk.

School Level. At the school level, the teachers and the School Improvement Committee members may meet as often as is necessary for purposes of examining the progress of the school.

Follow-up Work. To keep a close watch on progress the following measures are recommended :—

1. The several inspecting/controlling officers should review the progress of each backward area from month to month and should see to it that suitable action is taken to improve the position. For this purpose, systematic returns may be obtained and up-to-date educational statistics should be maintained at Block and District levels.

2. Block/Taluk/District level conferences may be arranged involving the parents and the public leaders to appraise them of the educational progress achieved in the respective areas and districts and to seek their active co-operation in this work.

3. Enrolment achievement in a school should also be the basis for judging the efficiency of teachers. Any good or bad work done in this behalf should be recorded in their confidential reports. Awards to teachers in the form of certificates, cash prize, advance increments etc., may be given for any outstanding work done by them.

II. Education of the Backward Section of the Community

The other problem is that of enrolling children from the poorer and weaker sections of the community. viz., Scheduled Castes,

Scheduled Tribes and landless agriculture labourers. Taking the country as a whole, the enrolment of the scheduled cast children is 85 per cent of that of other communities at the primary stage. The corresponding figure in the middle school stage is only 58 per cent. In some States, these enrolments are still lower. In U.P. for example, the enrolment of Scheduled Castes children at the primary stage is only 59 per cent of that of other communities and that at the middle school is only 46 per cent. The enrolments of Scheduled Tribes are even lower. Precise figures for groups like landless agricultural labourers are not available. But the available data indicates that their enrolments also are similar to those of the Scheduled Castes.

Recommendations of the Tenth National Seminar (1970) on Elementary Education for popularising Tribal Education

1. Training of Teachers. Such teachers working in the tribal areas who do not possess enough knowledge about the tribal life and culture may be given training in these aspects. The teachers posted in tribal areas should also acquire knowledge of tribal dialects.

2. Provision of Hostels and Extension of Ashram Schools. Whenever possible the schools functioning in tribal areas, may be provided with hostels which will solve many problems. Extension of Ashram schools, use of youth dormitories may also solve some of the problems.

3. Provision of Suitable School Accommodation. All the schools functioning in tribal areas should be provided with suitable accommodation.

4. Encouragement of Participation of Tribal Parents. Participation of tribal parents in the educational programmes may also be encouraged. The awareness and interest regarding the utility of education for the children should be created among the parents.

5. Provision of Audio-Visual Aids. Provision of audio-visual aids for the development of education of tribal children is essential and may be made available as soon as possible.

6. Introduction of Tribal Dialects as Medium of Instruction. In tribal areas, having a large population where people do not understand the regional language, tribal dialects may be introduced as the medium of instruction wherever possible in the initial stages and then they should be integrated with the general educational system and may be taught regional languages. But in the tribal areas where the children understand the regional language it can be used as medium of instruction. Such practice will reduce the rate of wastage and stagnation and also create interest among the children.

7. Suitable Curriculum for the Schools. There is a need for evolving a suitable curriculum for the schools functioning in tribal

areas. This curriculum may be science-oriented but culture-based. The curriculum should be so framed that this should include the various aspects of tribal life and culture.

8. Economic Incentives to Parents. Since the tribal people are economically backward and the children have to take part in different activities of the economic pursuits, the parents do not care for the education of their children because this sustains economic loss. Thus some economic incentive may be given to students, but not to parents, to prosecute their studies. Timing of the schools may be adjusted according to the local needs.

9. Special Training for Talented Tribal Students. A scheme to help the talented tribal students may be started. They may be given different types of training and they may be asked to work in tribal areas.

10. Improvement in Teacher Community Relationships. Steps to improve the Ashram school education may be taken. The teacher-community relationship may be improved. The cleanliness of the buildings, discipline in the Ashram Schools may be improved and adequate freedom to students for participating in various games may be given. Some courses to train these teachers may be organised.

III. Wastage and Stagnation

To quote the Education Commission Report : "Wastage and stagnation, like headache and fever, are not diseases in themselves : they are really symptoms of other diseases in the educational system, the chief among which are the lack of proper articulation between education and life and the poor capacity of the schools to attract and hold students. To these may be added a third ailment—poverty, which falls outside the system."

Meaning of Stagnation and Wastage

Stagnation. This means failure in class *i.e.* repetition of classes by pupils.

Wastage. This means drop out of pupils *i.e.* leaving the school before completing the primary course.

Stagnation. In order to have some idea of the extent of stagnation at the primary stage, from class to class, the Commission collected data regarding enrolments in Classes I-VIII in 29 districts out of 312. For each class, information was gathered on two points: total enrolment and number of repeaters, classified according to the total period they had spent in the class. From this information, the average period spent by the pupils in the class was calculated and its excess over one year—which is the normal period—was described as the 'stagnation index' for the class in that year. Table gives the stagnation indices separately for boys and girls for each class in all the nine States studied.

TABLE 1. ENROLMENT IN CLASSES I-VIII
(1911-12 TO 1965-66)

Class-wise Enrolment (in 000's)

Year	I	II	III	IV	V	VI	VII	VIII
1911-12	2,717*	1,062	757	545	324	167	119	76
	(100·0)	(39·1)	(27·2)	(20·1)	(11·9)	(6·1)	(4·4)	(2·8)
1916-17	2,933*	1,404	934	667	415	215	157	105
	(100·0)	(47·9)	(31·8)	(22·7)	(14·1)	(7·3)	(5·4)	(3·6)
1921-22	3,343	1,556	924	636	377	246	158	114
	(100·0)	(46·5)	(27·6)	(19·0)	(11·3)	(7·4)	(4·7)	(3·4)
1926-27	5,280	1,638	1,131	768	427	279	211	141
	(100·0)	(31·0)	(21·4)	(14·5)	(8·1)	(5·3)	(4·0)	(2·7)
1931-32	5,281	2,111	1,496	1,016	628	377	301	229
	(100·0)	(40·0)	(28·3)	(19·2)	(11·9)	(7·1)	(5·7)	(4·3)
1936-37	5,291	2,378	1,762	1,288	790	477	365	296
	(100·0)	(44·9)	(33·3)	(24·3)	(14·9)	(9·0)	(6·9)	(5·6)
1941-42	5,525	2,724	2,027	1,572	1,085	591	437	377
	(100·0)	(49·3)	(36·7)	(28·5)	(19·6)	(10·7)	(7·9)	(6·8)
1946-47	3,570	2,525	1,821	1,404	1,137	648	523	448
	(100·0)	(70·7)	(51·0)	(39·3)	(31·8)	(18·1)	(14·6)	(12·5)
1950-51	6,948	4,332	3,353	2,623	1,898	1,246	1,023	851
	(100·0)	(62·3)	(48·3)	(37·8)	(27·9)	(17·9)	(14·7)	(12·2)
1955-56	9,958	5,523	4,067	3,216	2,403	1,698	1,436	1,160
	(100·0)	(55·5)	(40·8)	(32·3)	(24·1)	(17·1)	(14·4)	(11·6)
1960-61	13,391	7,513	5,886	4,593	3,611	2,727	2,220	1,758
	(100·0)	(56·1)	(44·0)	(34·3)	(27·0)	(20·4)	(16·6)	(13·1)
1965-66	18,843	10,973	8,875	6,924	5,522	4,453	3,680	2,900
	(100·0)	(58·2)	(47·1)	(36·7)	(29·3)	(23·6)	(19·5)	(15·4)

*Includes enrolment in Infant A & B Classes.

Note. Figures within brackets indicate the percentage of enrolment in each class to the enrolment in Class I of the same year.

Source : Report of the Education Commission.

TABLE 2. STAGNATION INDICES FOR CLASSES I-VIII (1965)

Stagnation Index for Classes

State	I	II	III	IV	V	VI	VII	VIII
1. Andhra Pradesh								
Boys	63·4	38·4	27·9	21·0	19·6	13·3	13·7	19·8
Girls	71·6	42·9	30·1	32·2	22·4	11·8	12·2	14·8
2. Madhya Pradesh								
Boys	39·1	12·9	10·3	9·1	8·3	10·5	6·7	5·2
Girls	34·7	13·8	11·3	10·3	8·3	3·4	4·0	4·3
3. Maharashtra								
Boys	39·3	25·5	22·7	25·7	21·1	15·8	12·5	11·3
Girls	52·5	35·8	33·3	38·5	23·5	17·2	12·6	7·6
4. Rajasthan								
Boys	29·5	24·0	34·6	36·8	32·7	14·1	22·8	19·0
Girls	23·7	23·7	44·2	57·0	45·3	34·8	46·4	62·9
5. Punjab								
Boys	24·6	13·3	10·2	6·6	7·1	13·4	12·4	9·2
Girls	22·8	12·6	9·2	5·1	4·8	8·3	8·7	7·1
6. Uttar Pradesh								
Boys	27·1	14·2	9·1	6·4	4·3	4·9	6·1	12·5
Girls	18·5	14·3	11·5	9·4	9·1	12·7	10·7	25·5
7 Mysore								
Boys	53·2	36·6	27·2	26·4	15·0	12·7	12·6	...
Girls	66·1	39·9	27·1	19·0	12·4	13·1	15·9	...
8. Kerala								
Boys	27·2	26·9	26·0	29·0	27·2	26·0	24·8	...
Girls	26·3	26·0	24·6	27·1	26·6	23·1	25·7	...
9. Orissa								
Boys	43·1	33·3	33·7	30·0	15·4	19·3	21·5	12·3
Girls	40·1	38·8	27·5	21·2	15·8	43·3	34·4	16·2
Total								
Boys	40·3	26·6	22·6	21·7	16·4	14·1	13·7	13·2
Girls	47·1	33·1	26·6	25·6	19·8	17·3	17·9	16·4

Source : Report of the Education Commission.

It will be seen from the preceding table that

—stagnation is highest in Class I;

- it is reduced considerably in Class II and then remains fairly constant in Classes III and IV;
- at the higher primary stage, stagnation decreases still further;
- on the whole, stagnation among girls is greater than among boys; and
- the extent of stagnation shows considerable variations from area to area.

Wastage. A study made by the Research Unit of the Directorate of Education, Maharashtra State, to follow the movement of pupils from class to class in the primary schools of Poona District showed that, if one begins with 1,000 students in Class I in a given year, as many as 414 of them leave school before completing Class IV. The following are the actual findings of the study :

(1)	Left school in the first year of their school life in Class I	144
	Left school in the second year of their school life but still in Class I	27
	Left school in the third year of their school life but still in Class I	12
	Total left from Class I	<u>183</u>
(2)	Left school in the second year of their school life but after completing Class I and joining Class II	67
	Left school in the third year of their school life after completing Class I in two years and joining Class II	8
	Lift school in the fourth year of their school life after completing Class I in three years and joining Class II	5
	Left school in the second year of their school life after failing in Class II	25
	Left school in the third year of their school life after failing in Class II	13
	Total left from Class II	<u>118</u>
(3)	Left school in the third year of their school life after passing Class II and joining Class III	61
	Left school in the fourth year of their school life after passing Class II and joining Class III	18
	Left school in the third year of their school life after failing in Class III	9
	Total left from Class III	<u>88</u>

(4) Left school in the fourth year of their school life after passing Class III and joining Class IV	25
Total left from Class IV	25
Grand total of all students who left before completing Class IV	414

Sad as this picture is, it is better than the situation in the country as a whole, mainly because the area where the study was conducted is fairly advanced educationally. A rough and ready method to measure the extent of wastage is to compare the diminution in enrolment from class to class over a series of years. Table shows the extent of this diminution for the country as a whole in the post-independence period, separately for boys and girls and also separately for the lower primary and higher primary stages. The general picture it presents is even worse than that of the Poona Study. Wastage is very large at the lower primary stage—about 56 per cent for boys and 62 per cent for girls. About two-thirds of this wastage occurs in Class I. Moreover, it has remained fairly constant in the case of boys while showing a slight improvement in the case of girls. At the higher primary stage, wastage is much less—about 24 per cent for boys and 34 per cent for girls; and what is more important, it is decreasing consistently, although at a slow rate.

Stagnation and Wastage in Class I. The large stagnation and wastage in Class I is due to a variety of causes which include :

1. The heterogeneity of the age-composition of students;
2. The practice, which obtains in several States, of making fresh admissions throughout the year, instead of in the first month or so of the school year;
3. Irregularity of attendance;
4. Lack of educational equipment in the school as well as with the children;
5. Over-crowded classes;
6. Unsuitable curricula;
7. Inability of the teachers to use playway techniques which can assist in initiating the children pleasantly to school life;
8. Poor teaching of beginning reading;
9. Inadequately prepared teachers; and
10. A wrong system of examinations.

TABLE 3. WASTAGE AT PRIMARY STAGE (1949-50 to 1961-62)

Classes I-IV (Lower Primary)

Year	Boys				Girls			
	I	II	III	IV	I	II	III	IV
1949-50	100	...	...	...	100	...	...	...
1950-51	100	65·1	...	...	100	57·4	...	...
1951-52	100	66·0	54·2	...	100	59·6	44·5	...
1952-53	100	64·9	53·3	45·3	100	57·8	43·9	34·0
1953-54	100	65·8	54·8	46·8	100	58·7	45·6	35·2
1954-55	100	63·0	53·7	47·2	100	57·8	45·6	36·3
1955-56	100	61·8	52·7	46·7	100	58·2	45·4	36·7
1956-57	100	60·8	50·9	45·9	100	55·3	44·6	36·5
1957-58	100	61·4	50·0	42·9	100	55·0	43·3	35·2
1958-59	100	62·1	51·8	43·1	100	58·2	43·9	34·9
1959-60	...	61·2	51·2	44·3	...	56·4	45·8	35·5
1960-61	...	...	51·1	44·4	...	...	45·1	37·6
1961-62	...	...	...	44·4	...	...	...	37·5

Classes V-VII (Higher Primary)

Year	Boys			Girls		
	V	VI	VII	V	VI	VII
1949-50	100	...	...	100	...	...
1950-51	100	75·5	...	100	59·4	...
1951-52	100	77·5	68·5	100	60·7	49·5
1952-53	100	75·8	65·0	100	60·3	49·4
1953-54	100	74·8	65·6	100	60·3	53·1
1954-55	100	73·7	67·0	100	63·4	51·6
1955-56	100	76·4	66·8	100	65·7	55·3
1956-57	100	79·1	69·4	100	72·4	59·9
1957-58	100	77·7	69·5	100	69·0	61·8
1958-59	100	83·2	70·5	100	72·9	61·0
1959-60	100	85·9	73·3	100	81·7	61·5
1960-61	...	84·3	74·2	...	74·8	68·1
1961-62	...	...	75·6	...	...	66·2

Source. Report of the Education Commission.

Methods of Retention Checking

1. Improvement in the Quality. The most important programme to be implemented during the next ten years is to improve the quality of primary education and to reduce stagnation and wastage to the minimum. The target should be to reduce stagnation and wastage by about half by 1976 and to almost eliminate them by 1986.

(1) Stagnation and wastage are very high in Class I and their reduction should be a major programme. Of the various measures to be adopted for the purpose, three are very important.

- (a) treating Classes I and II (and wherever possible even Classes I—IV) as one integrated unit ;
- (b) introducing a year of pre-school education; and
- (c) adopting play-way techniques in Class I.

2. School Improvement Programme. Stagnation and wastage in other classes should be reduced by providing various forms of part-time education, by implementing a nation-wide programme of school improvement, and by an intensive programme of parental education.

3. Literacy Classes. All children in the age-group 11—14 not attending schools and who have not completed the primary stage of education and become functionally literate, should be required to attend literacy classes for a period of at least one year. The classes should be organised in primary schools and in a flexible manner to suit the convenience of the pupils. They should begin on a voluntary basis; but compulsion may be tried when the local community has become familiar with the concept.

4. Part-time Education. Similar facilities for part-time education should be provided for children who have completed the lower primary stage and who desire to study further. (Their magnitude may be 10 per cent of the total enrolment in 1975-76 and 20 per cent in 1985-86). The curriculum may follow the general education pattern or contain a large vocational element as required by local needs.

Causes of Wastage and Stagnation

1. Poverty of parents which necessitates the utilisation of the services of the children for supplementing their earning;
2. Poor nutrition of children;
3. Apathy and indifference of teachers;
4. Uncontrolled fresh admissions without consideration of age (*i.e.* admission of under-aged children) or time (*i.e.*, admissions throughout the year);
5. Inefficient teaching—lack of training for teachers; plural-class teaching.

6. Lack of adequate accommodation and attractive environment.
7. Existence of large number of single-teacher schools.
8. High pupil-teacher ratios.
9. Lack of regular periodical teacher-parental contacts. Apathy of parents towards the education of their children.
10. Lack of regular and effective inspection and academic guidance by inspecting staff.
11. Existence of a large number of incomplete primary schools.
12. Irregular and untimely appointment of teachers.
13. Failure to enforce compulsory attendance.
14. Lack of reading and writing materials required for children and teaching aids for teachers.
15. Least qualified and untrained teachers being kept in charge of Class I.
16. Frequent transfer of teachers.

Remedial Measures Recommended

1. Under the School Health Service, pupils may be given nutritious diet by the introduction of mid-day meals.
2. Fresh admissions should be made at the beginning of the school year only within two months from the date of commencement of the session of the school.
3. As far as possible, provision should be made for encouraging the starting of pre-primary schools to admit children of below 6 years of age.
4. Provision of part-time schooling may be made for the benefit of children who cannot attend the school during regular hours on account of domestic and economic disabilities.
5. Improvement of the professional competence of teachers by providing training facilities, pre-service and in-service training facilities. Necessary guide books and literature should also be provided. Teachers should also be trained in first aid and health services.
6. Adequate and attractive school building should be provided. Necessary equipment and teaching aids should be supplied.
7. Teacher-pupil ratio may be maintained at such a level as to ensure adequate individual attention to be paid to each individual child in Class I.
8. As far as possible, only trained teachers should be in charge of class I.

9. Children may be liberally promoted from Class I to Class II.

10. Effective supervision and inspection may be provided.

11. Special provision should be made for educating the mentally retarded children by opening special institutions in each State and District level.

Targets. The following targets for the Fourth Plan have been recommended :

1. At each school level, wastage and stagnation should be studied and targets may be prescribed by the inspecting officers concerned. The over-all purpose should be to reduce the wastage and stagnation during the Fourth plan Period by about 50 per cent and by the end of the Fifth Plan, these should further be reduced by about 90 per cent.

2. Inspecting Officers should maintain charts showing progressive reductions of wastage and stagnation class-wise in each school under their jurisdictions.

3. Targets may similarly be fixed at Block/Taluk, District and State levels.

IV. Panchayati Raj

The members of the Seminar 1964 examined the administration of primary education under the Panchayati Raj institutions in different States.

The Group reviewed the Panchayati Raj institutions in different States. The following States have not enacted the Panchayati Raj Act.

1. Jammu & Kashmir.

2. Mysore.

The following States have enacted the Panchayati Raj Act but have not transferred 'Education' to the Panchayati Raj.

1. Assam.

2. Bihar. The Act is proposed to be brought into force in four districts, as an experimental measure.

3. Kerala.

4. Madhya Pradesh.

5. West Bengal.

The following States have enacted the Panchayati Acts and have also transferred 'Education' to the Panchayati Raj.

1. Andhra.

2. Gujarat.

3. Madras.
4. Maharashtra.
5. Orissa.
6. Rajasthan.
7. Uttar Pradesh.

The pattern of the administration of education under Panchayati Raj varies from State to State.

V. Girls Education (1968-69)

Age-group	Boys—% of Education	Girls—% of Enrolment
(a) 6—11	95·2	58·5
(b) 11—14	45·4	18·8
(c) 14—17	28·5	9·8

Causes of Shortfalls in the Enrolment of Girls at the Primary and Middle stages. The main causes for the shortfalls in the enrolment of girls seem to be as follows:—

1. Economic backwardness of the rural community.
2. Lack of proper social attitudes in the rural areas for the education of girls.
3. Lack of educational facilities in rural areas.
4. Lack of women teachers.
5. Lack of proper supervision and guidance due to inadequate women personnel in the Inspectorate.
6. Lack of proper incentives to parents and children.

1. Economic Backwardness of the Rural community. The girls are very useful at home for carrying out domestic duties and so mothers are reluctant to send them to school. They cannot maintain servants or helpers. Further, they do not have the means for providing adequate clothing and books which would be needed if the children go to school. A large number of children in the rural areas are under-nourished. They hardly have a square meal a day. Unless the parents are given some kind of economic relief, it will be impossible to achieve the targets of the Fourth Plan. The following remedial measures are being suggested:—

- (a) Free uniforms and free books to the needy and deserving children.
- (b) Attendance scholarships which serve as a compensation to the parents. This will also ensure reduction of wastage and stagnation.
- (c) Mid-day meals.

2. Lack of a Proper Social Attitude in Favour of Girls' Education in Rural Areas. The Purdah system (in some States such as in Orissa, Uttar Pradesh, Bihar and Rajasthan) and certain other harmful social customs in these States and in others stand in the way of the development of girls' education. In some places caste barriers also contribute to this. Further the parents are not sufficiently favourably disposed towards girls' education as they have not yet come to understand its value. The school and home are different worlds. The parents, the teachers and the social workers should break the barrier existing between these, so that the school becomes the centre of the community life. Many parents who have a desire to educate their children are unable to do so as they are not in favour of co-education beyond the age of 9 plus. The following remedial measures have been suggested :—

- (a) To study the problems relating to women's education and to get detailed scientific data, a thorough research should be taken up by the Institutes of Education in different States and co-ordinated at the national level.
- (b) Establishment of separate schools for girls at the middle and high school stages.
- (c) Appointment of School Mothers in co-education primary schools.
- (d) Opening of creches and nursery classes, wherever possible.
- (e) Creating public opinion in favour of girls' education through—
 - (i) Enrolment Drives at the beginning of the school session and celebration of the Girls' Education Week through *Prabhat Pheries*, Cultural Educational Programmes, Documentary Film Shows, Social Service Camps in villages by senior students and teachers and follow-up programmes by periodical visits.
 - (ii) Close co-operation with the activities of other women social workers in the various fields like S.E.Os., Gram Sevikas, Mahila Samiti Members, Women Health Visitors and Lady Extension Officers.
 - (iii) State Council of Girls' Education and its District counterparts.
 - (iv) Radio, Press, Films and Posters.
 - (v) Parent-Teacher Associations.
 - (vi) Adequate literature in the form of books and pamphlets for popular reading by the rural people and workers.

3. Lack of Adequate Educational Facilities in the Rural or Backward Areas. The factors responsible for the lower enrolment of girls are as follows :—

- (i) Non-availability of a school within walking distance of the girls, particularly in backward areas.
- (ii) Unwillingness of parents to send their daughters to mixed schools beyond the age of 9 plus.
- (iii) Lack of separate sanitary facilities for girls in the mixed schools.
- (iv) Lack of suitable school buildings and equipment which tend to create a poor school environment.

The following measures would overcome these difficulties.

- (a) The target in the Fourth Plan should be to have at least one primary school within a radius of one mile from every home which is within the walking of a child.
- (b) Hostel for girls in the middle and high school stages.
- (c) Maintenance stipends to girls residing in hostels for meeting their board and lodging expenses, at least in part.
- (d) Subsidised transport facilities, wherever necessary and possible.
- (e) All priority to be given to the construction of suitable buildings for girls' schools.
- (f) Free education for girls up to the School Leaving Certificate Examination.

4. Lack of Women Teachers. The lack of women teachers in primary and middle schools was very largely responsible for the low enrolment of girls, especially in the six backward States. It is an accepted fact that the primary schools should be staffed by women teachers. At present the proportion of women teachers to men teachers is very low. Even in the more advanced States like Kerala, only about 45% of the teachers in the primary schools are women. The figures for Madras is 33%; for Mysore, it is 25% and in West Bengal it is 14%. In the backward States the position is much worse. For example it is 5% for Orissa and 10% in Rajasthan. Although the position has improved since the end of the Second Plan, the progress is by no means satisfactory. The training programme for women should be accelerated. The problem has to be tackled from two directions : (a) by increasing the recruitment potentiality of the training institutions and (b) by opening up opportunities for unqualified adult women to take up the teaching profession. The shortage of women teachers is also due to the fact that a good number of qualified teachers are unwilling to go to rural and backward areas and to areas which are at a distance from their homes because of lack of minimum amenities.

Suggestions for Increasing the Number of Women Teachers

(a) A large number of training institutions has to be provided for women, especially in the six backward States. These institutions should generally be located in rural areas and they should generally recruit their trainees from that area.

(b) Condensed course centres should be stated in these backward areas to open up avenues to adult unqualified women for employment as teachers. Wherever possible such Centres should be attached to the training institutions.

(c) Larger number of quarters for women teachers should be provided, particularly in rural areas. Our target in the Fourth Plan should be to provide at least 50 per cent of the women teachers with quarters in primary schools.

(d) All women teachers employed in rural areas should be given adequate rural allowance and not less than Rs. 15 per month.

(e) Special stipends should be given to girls in high schools with aptitude for teaching.

(f) Wherever possible husbands and wives should be posted in the same place even if they work in different departments of the Government.

(g) Free training should be imparted with stipends to all candidates of training institutions.

(h) In-service training of education should be given to untrained women teachers who have put in at least two years of service. The period of training or education should be treated as on duty.

(5) Lack of Supervision and Personal Guidance : The development of girls' education in the different States have been seriously hampered because of the inadequate machinery to look after the various programmes in this field which require concentrated attention, special care and individual guidance. The number of lady officers is far too small to shoulder the responsibility of speeding up the progress of girls' education as envisaged in our plan. The Offices are poorly staffed and ill-equipped. They do not have suitable conveyance facilities which would help in maintaining regular contacts within their field of work. In view of the nature of work demanded by the developmental programmes, the following measures for immediate implementation are suggested :—

1. Increase in the number of women inspecting officers, particularly in the backward States, at different levels including State level and Directorate level.

2. Provision of adequate transport for all district women inspecting officers.

3. Adequate office staff and equipment.

4. Residential facilities to all women officers at all levels.

5. Adequate funds at the disposal of the State Council for closer contact with rural areas.

6. Social Education for Adult Women. The problem of girls' enrolment is very closely connected with the problem of social education of adult women. In fact, the success of girls' education depends in a very large measure on the successful implementation of social education programmes for adult women, specially in rural areas.

The percentage of literacy for women in India is 12.8. The figure for women's literacy in rural areas will be much less. The ignorance of women and the lack of communications create mental barriers and shunt out a very large percentage of adult women from the outside world. This problem can be tackled in the following ways :

(a) By opening adult literacy classes in larger numbers.

(b) By teaching simple skills like sewing, knitting, handicrafts etc., and knowledge of basic principles of health and food habits.

(c) New attitudes towards community living, family planning superstitions, caste, etc.

This programme can be tackled effectively with the help of the Education Department in co-operation with other departments concerned like Community Development, Health and Social Welfare.

(7). Lack of Adequate Incentives to the Studies. The poor enrolment position of girls, specially in backward areas, cannot be improved unless special incentives are provided. Special schemes sponsored by the Government of India have been adopted in several States. The position has improved since the Second Plan period. Although the schemes have been implemented, they do not cover a very wide area and the total results thus fall far short of expectation. In order to ensure that these special schemes provide adequate incentives to the students, it is necessary that they are adopted in larger measure and over a wider geographical area with special priority to the backward districts or pockets. The following measures have been suggested:—

(a) The number of attendance scholarships should be doubled in the Fourth Plan.

(b) The allowance of the School Mothers should be enhanced to Rs. 30 per month in the Fourth Plan so that qualified women may be attracted to take up the work.

(c) The number of maintenance stipends should be doubled in the Fourth Plan and the rate of such stipends should be adequately increased in view of the rising prices all over the country.

(d) The number of sanitary blocks in co-educational primary schools be adequately increased during the Fourth Plan.

(e) Larger allocation of funds should be made in the budget for construction of hostels for girls during the Fourth Plan.

VI. Cheap Housing for Primary Schools

Primary School Buildings

Every State today finds it very difficult to cope up with the construction programme for the primary school buildings and unless some drastic measures are taken, it would not be possible to cope with the need. As far as the provision of buildings for the primary schools is concerned, it has been estimated today that nearly 50 to 60 per cent of the primary schools are without their own or proper school buildings. This is a very serious problem and unless it is taken up on top priority, it would adversely affect not only the enrolment in the backward areas, but also the qualitative improvement of the schools. It is, therefore, suggested that a State School Building Corporation should be immediately set up in each State under the D.P.I. It should undertake, not only the construction of the school buildings, but also look after their maintenance.

As a rule, the local people should be required to contribute 50 per cent of the cost of school buildings. It will, however, not be possible for the people belonging to the scheduled castes and scheduled tribes to contribute 50 per cent of the cost. It is suggested, therefore, that 50 per cent contribution in these areas should come from the Government. The maintenance charges of the Primary School Buildings in these areas will also be paid by the State Government or the State Government will maintain the primary schools in these areas at its own cost.

Open Air Schools. The task of providing 'Schools for All' is a stupendous one. Our resources are limited and it is, therefore, imperative for us to see that each rupee that we spend is fully utilised to the last paisa. It has been observed in a pamphlet "Schools for All": "If we put up school buildings, as in the past, it will not leave us with enough resources to undertake improvement in the quality of education or in the status of teachers, or provision of equipment and other necessary material needs of the school." Our Prime Minister who was deeply concerned about this problem, wrote as follows: "Let us take Primary education which must necessarily be the base. We hold it up because of lack of money and lack of teachers especially for Basic Education. Probably we still spend much more on buildings than on equipment or teachers. Can we not stop putting up any buildings in rural areas and devote the money thus saved to a better class of teachers as well as to some equipment? The equipment would have to be kept somewhere and there should be a small room or hall for this purpose. But all the teaching might well be done in the open under trees or under very simple sheds. It must be remembered that our climate helps and normally it is healthier to sit outside under a tree or in a grove, except during the rainy season. Also our old traditions fit in with this open air teaching."

"It seems to me more important to have a proper house for the teacher than to put up a building for the school. The teacher could

keep the equipment and teach outside. The school revolves round the teacher and not round the building. Can we develop any kind of a scheme so that village people can contribute in some way for the teacher? That was old practice. Now, we are often offered by villagers money for a building and asked to meet the running expenses and especially for the teacher. They could even contribute in kind."

"I should like the village to give a small plot of land for the school and the teacher. A vegetable garden could be laid down there. The status of the teacher would go up, even though his salary may not be as much as we would like it to be, though it would be substantially higher."

The late Maulana Abul Kalam Azad also expressed similar views in his presidential address to the 25th meeting of the Central Advisory Board of Education. "I have come to the conclusion that whatever funds we have must be devoted to the spread of education rather than the construction of school buildings. Our climate is such that for a large part of the year classes can be held in the open. If school holidays synchronise with the monsoons, we can to a large extent reduce the need for full scale school buildings. We can also economise by using simpler methods of construction for school purposes. From the earliest times rural India has lived in mud, bamboo or thatched houses. There is no reason why schools also should not be housed similarly. Our attention must be diverted from imposing school buildings to better teachers and better teaching. We should appeal to villagers that if we supply them with the material, they should build houses of the same pattern as the houses in which they live. They must also take the responsibility for maintaining them. I would request my friends, the Ministers of Education of the State Governments, to look into this question more carefully and take steps for overcoming the problem of shortage of funds."

K. G. Saiyidain, the Educational Adviser to the Government of India, observes, "In the matter of buildings, there have been two schools of thought—those who ask for impressive buildings for schools and those who favour the "one-tree-one-school" approach. (I am putting the two points of view in their extreme form.) It is obvious that there are some considerations which weigh in favour of each. Ideally, a school building should be planned spaciously, functionally and with pleasing architectural features. It should stand out in the village or the city as something of which the local community can be proud. In fact, in some educationally advanced and wealthy countries, schools are housed in beautiful buildings, which are not only stimulating centres of education for children but also vital centres of community life. Personally, I am of the view that, given the resources, nothing, in reason, can be too good for our children. On the other hand, in our existing conditions, there is much to be said—not only on financial, but also on educational, grounds—for keeping

education close to Nature, for teaching children not within the confines of small, cramped and dingy school rooms but in the open air, so far as possible, so that contact with the earth and sky and trees and flowers and birds and animals becomes part of their environment. This approach, however, has certain limitations. In many regions of the country there are rigours of climate which make open air schooling difficult in certain parts of the year. Moreover, some covered space is needed not only for sheltering school apparatus, books and furniture but also for organised craft work. It becomes necessary, therefore, to strike a balance between these various considerations and, in view of our resources position. We must therefore strike the balance in favour of economy. We have to think of ways to provide the minimum necessary accommodation as economically and quickly as possible and leave it to local effort and initiative and civic sense to complete the school building in due course. In the case of rural schools, it is necessary to utilise local materials and not impose on the village a style of construction which is out of tune with its general set-up. This does not, however, mean that school houses need be drab or unattractive like most of the existing village houses. Far from it. With cheap local materials, it is possible to build school which will be functionally useful and artistically attractive."

In the opinion of the Secondary Education Commission, under certain conditions some of the activities of the school may be carried on in the open-air during part of the year. The Commission further notes :—

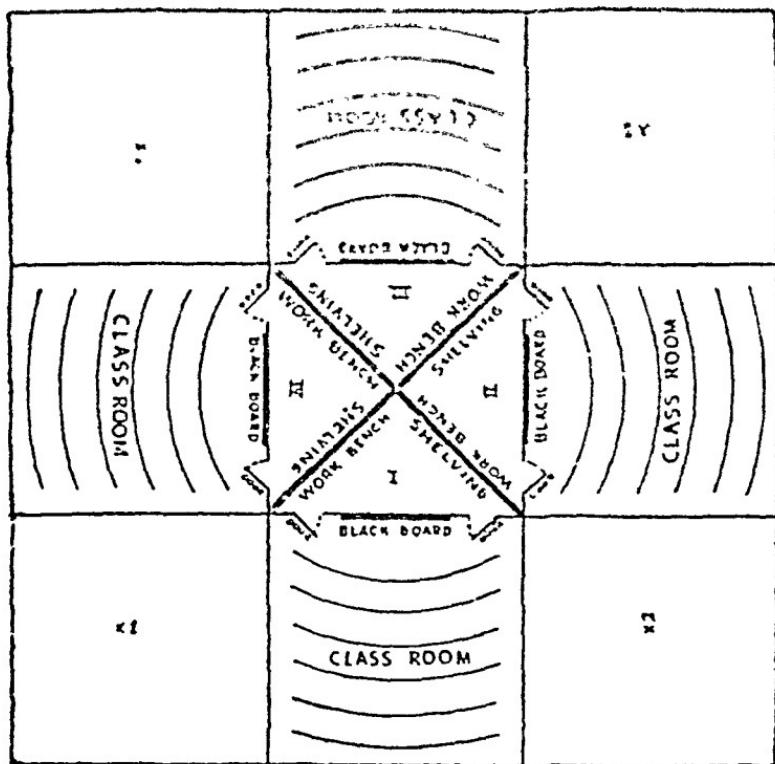
(1) The open-air system lends itself to small groups of students being taught there, and it also requires good shade and a large area for carrying on instruction satisfactorily.

(2) While much theoretical instruction in certain subjects may be given in open-air classes it is impossible in certain other subjects unless suitable accommodation is provided for them. Thus the laboratories, libraries and workshops should be located in buildings suitably constructed. In any case the school requires considerable grounds for the physical education programme to be carried out for group games and certain of the extra-curricular activities of the school. There is also the need for agricultural farms in schools where agriculture is taught as a practical subject.

A "Nucleus First" Type Schools. The brochure "Schools For All" gives a scheme for the construction of school buildings. The scheme may be described thus : Instead of building a complete school right from the start, we should try to build it by stages, starting the institution with a nucleus. There should be a provision for storage, display and black-board space in the nucleus. The actual teaching may be carried out in the open. A 'pakka' room of suitable size may be built and partitioned into four equal isosceles triangles. There will be two openings of each triangular room so formed. A chalk board will be fitted between them to the wall. There will be storage

Spaces X_1 , X_2 , X_3 , X_4 , between the classes (as shown in the diagram) are to be used by the classes for activities like gardening, planting and other craft work. The nucleus will thus provide excellent facilities for four grades in an Elementary School.

A 'NUCLEUS FIRST' TYPE SCHOOLS (OF 4 TEACHERS)



- NUCLEUS (storage, workbench, display space on back of door, black-board).
- SHELTER (floor, roof, wind break) to be provided with local effort—trees or canvas bamboo at first, permanent construction later.
- PLANTING LABORATORY—Adjacent planting area to be developed entirely by pupils and teachers.

Advantages. Advantages as envisaged in the brochure are :—

1. It will enable us to get a well equipped school functioning quickly and with a minimum of expenditure.
2. It would provide a flexible long range plan within the means of every community.
3. It would provide the teacher with better tools than are available in present school buildings.
4. It would induce and inspire local effort.
5. It would give local effort a simple plan of action.
6. It would provide an environment that will almost automatically lead to adoption of some form of Basic education. The nucleus will free the children from drab, limited and walled-in class rooms with nothing but bookish instruction and on the other hand will bring them into close partnership with life and nature.
7. The nucleus will be provided by the State and the local community encouraged to proceed with the rest. Thus it would shift financial responsibility from the State to the local effort.
8. It will bring about better team work between pupils, parents and the State. More local effort will bring about more local interest. More local interest will result in better schools. The pupils and the teachers would also have a definite part in the building of this new school as has been suggested.

"The plan will not only reduce the cost but make an important contribution to the philosophy of education. It will bring the community into the school and give proper recognition to local effort—a very important consideration indeed. The parents will have reason to believe that the school is their own and be proud of it. The requirements of teachers, also, in respect of teaching aids, equipment and other ancillary facilities will be satisfactorily met."

To conclude, the brochure contains the following as the guiding principles for planning future schools :—

- (i) The site should be chosen very carefully and should be provided in rural areas by the community and in urban areas by the local authorities.
- (ii) A careful master plan should be drawn up for the site as a whole. In doing this, it should be remembered that schools are neither built for the past nor for the present. They have to be planned and built for the future.
- (iii) The master plan should be followed by the construction of the nucleus. It should be strong, beautiful and functional and should inspire the community to complete the master plan and do so in a befitting manner.
- (iv) As numbers grow, the nucleus could be repeated and the school would be able to receive more scholars.

The Commission gave the following suggestions :

1. Allocations for construction of school buildings should be increased in the Central and State budgets.
2. Resources should be mobilised on the basis of equalisation.
3. Loans and grants-in-aid should be given on a liberal basis to private schools for the construction of building.
4. The norms and guidance already available for spacing and planning of school buildings should be put into practice.
5. In view of the shortage of traditional building material and the cost involved, well designed and constructed *kucha* structures should be accepted as part of the school system.
6. In rural areas efforts should be made to encourage local initiative and contribution in putting up school buildings. The 'nucleus' approach of the Ministry of Education is recommended for general adoption.
7. Economy in these buildings should be effected by using locally available materials, omission of certain finishes, and acceptance of a lower standard of construction.
8. Temporary structures may be used wherever possible.
9. Improved techniques of construction may be adopted in putting up *pucca* buildings.
10. **Expedited Construction.** In order to accelerate provision of school buildings construction in rural areas may be entrusted to local communities or village panchayats, and in urban areas, municipalities and corporations may be utilised for the purpose.
11. **Educational Building Development Group.** In order to supervise and guide the programme of construction of school buildings and introduce improved techniques, an Educational Building Development Group should be set up in each State within the Public

Works Department and working in close association with the Education Department. These groups will standardise details of construction in the region so as to make possible the mass production of the components on a factory scale.

12. Building Development Group at the Centre. A similar Building Development Group should be set up at the Centre to co-ordinate the work of the State groups.

13. Education Building Consortia. To avoid delays in the construction of government buildings a separate unit of the P.W.D. should be set up for the execution of education building programmes. At a later stage an Education Building Consortia may be set up to exploit the advantages of industrialised buildings.

The economy measures worked out by the Educational Building Development Group should be made known to private institutions and grants-in-aid given on the basis of upper cost limits.

Article 45 of the Constitution and Present and Future Expansion of Primary Education

Article 45 of the Indian Constitution directed that free and compulsory education for all children until the age of 14 years should be provided by 1960. In spite of the unprecedented progress made after independence, it has not been possible to realise the goal.

The Education Commission has moved the years further for the complete achievement of the goal of universal education. The Constitutional Directive will be fulfilled in some places such as urban areas and advanced States only in 1975-76, but it has also suggested a deadline that all the areas in the country should be able to provide five years of good and effective education to all the children by 1975-76 and seven years of such education by 1985-86. The Commission has visualised both the quantitative expansion and qualitative improvement. The task is formidable and would need the utmost efforts to realise the goal. The enrolment in classes I-VII will have to be raised from 50 million in 1965-66 to 125 million in 1985-86. Thus, the total additional enrolment in classes I-VII during the 20 years will have to be 75 million which works out to an annual increase of 3·75 million, as against the average annual increase of about 3·44 in the Third Five-Year Plan, the highest we have been able to achieve so far. The Commission has further worked out that the enrolment at the lower primary stage (Classes I-IV) will rise from 37 million in 1965-66 to 72 million in 1975-76, and 76 million in 1985-86. The enrolment thus doubles in 20 years. The enrolment at the higher primary stage (Classes V to VII) will rise from 13 million in 1965-66 to 32 million in 1975-76 and 49 million in 1985-86. This would imply an increase of about four times in the same period. It is worth noting that the estimates have been worked out in terms of classes instead of ages of children. Statistically, it has been found that a large number of children reach the age of 14 even before they come to the end of

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Class VII. The lesser number who are not yet 14, at the end of Class VII, may either proceed to the next higher classes or may like to discontinue their studies for entering working life. For the later group, estimated to be about 10 per cent of the age-group, the Commission consider it not advisable to lengthen the primary course but recommends the provision of short vocational courses.

Two more significant but difficult aspects of primary education have been emphasised by the Commission. The first is the reduction of wastage and stagnation. It was observed that out of 100 children entering Class I only about half completed Class IV and only 34 completed Class VII. The Commission recommends that every child entering Class I should progress regularly from year to year and reach Class V and at least 80 per cent should reach Class VII. This means there should be no failure below Class V. Secondly, great emphasis be laid on quality. The torrent of quantitative expansion has the tendency to corrode the edges of quality. This has resulted in the unsatisfactory standards of primary education which ends up by transmitting pieces of information to the child who does not move beyond literacy. What is desired is to ensure that primary education leads to harmonious development of the personality of the child and lays the foundation for him to grow into a responsible and useful citizen of the country.

The National Policy on Education, 1968, lays down that 'strenuous efforts should be made for the early fulfilment of the 'Directive Principles under Article 45 of the Constitution' and 'suitable programmes should be developed to reduce the prevailing wastage and stagnation in schools and to ensure that every child who is enrolled in school successfully completes the prescribed course.'

The Central Advisory Board of Education at its 35th meeting held on May 2-3, 1970, at New Delhi reviewed the present position in regard to free and compulsory primary education and adopted a resolution which reads : "The Board views with concern the progress

f primary education in the country. On the basis of the present trend, it appears that no State would be able to realise the goal set in Article 45 of the Constitution earlier than 1980, and several States will be able to do so only in the 21st century...The Board requests the Chairman to set up a high level Committee to examine the whole issue on all its aspects." In pursuance of this resolution, a Committee under the chairmanship of the Union Minister of Education and Youth Services was set up. The Committee has been engaged in reviewing the position afresh and formulating concrete proposals towards the realisation of the Constitutional directive on compulsory primary education by 1985. Meanwhile, pilot projects are either in the offing or already on, with regard to both the expansion and improvement of primary education. The NCERT, for example, was engaged in a pilot project in 10 schools in Uttar Pradesh to study the impact of the ungraded school system on reducing wastage and stagnation.

Fourth Five-Year Plan (1969-74)

The targets of elementary education in the Fourth Five-Year Plan are set out below :

(Enrolment in Million)

<i>Stage (age-group)</i>	<i>1968-69</i>		<i>1973-74 (target)</i>	
	<i>enrolment % of age-group</i>			
Primary (6-11) [Classes I-V]	55·49	77·3	68·58	85·3
Middle (11-14) [Classes VI-VIII]	12·27	32·3	18·10	41·3
Elementary (6-14) [Classes I-VIII]	67·76	61·7	86·68	69·8

Bihar, Madhya Pradesh, Rajasthan and Orissa have the problem of low enrolment of girls and children of Scheduled Castes and Scheduled Tribes. Efforts will be made, during the period to remove the imbalances within the States. Some States may adopt double shift in Classes I and II. In regard to the age-group 11-14, the problem is much more difficult as a large majority of the parents in rural areas withdraw their children from schools. A possible remedy is to provide part-time education on a large scale to children of this age-group. Provision has accordingly been made for pilot projects, for part-time education. The Fourth Five-Year Plan observes : "Setting up of schools within the reach of every child is the first necessary step towards universality of enrolment. To achieve this at minimum cost, detailed district plans will be drawn up. Each State will formulate a phased programme for the introduction of universal education for all children in the age-group 6-14."

Addressing the National Seminar on Primary and Work-Oriented Education in 1970 the Union Education Minister reminded : "Let us not forget that the success of primary education depends on two things. One is the pre-primary stage and the other parents... We have to educate the parents. If the parents think that education is not worthwhile you will not be able to make much headway. The other thing is pre-primary education...Before the child goes to the primary school he must be interested in education and develop school readiness, His intellectual curiosity must be roused, and the parents must be interested to see that their children should go to schools. Otherwise you may have a horse carriage but the passenger will not be there."

Single-Teacher School

Single-Teacher schools have existed in our country since the earliest days and in view of the distribution of the population in a larger number of villages, they are likely to remain a permanent feature of our educational landscape. According to the Education Commission about 40% of our schools are single-teacher schools. In a single-teacher school, a teacher has to handle more than one class, often two, three or four according to the nature of the school. He has to resort to multiple class teaching.

Mr. J. P. Naik observes in this connection, "Ever since the earliest Vedic times, single-teacher schools have existed in India, and except for the microscopic minority of a few multi-teacher institutions, they have always monopolised the whole field of education".

Among the various authorities quoted by Mr. Naik it is of great interest to note what Bernier wrote as late as the 17th century, "Banaras is a kind of university, but it has no college or regular classes as in our universities. It resembles rather the schools of the ancients, the master being spread over the different parts of the town in private houses...Some teachers have four and some six disciples, the most eminent may have 12 or 15, but this is the largest number".

Reasons of Their Existence. Three important reasons may be ascribed for the existence of this institution :—

1. Small number of children to be educated at a place.
2. Hereditary association of a family to choose a teacher on the traditional basis that led to the choice of a priest.
3. Prevalence of the old educational theory that the relation between the teacher and the pupil should be most intimate.

Advantages of Such a System

- (i) Close intimacy between the teacher and the pupil.
- (ii) Greater individual attention.

- (iii) Monitorial method of teaching.
- (iv) Less expensive.

Monitorial Method of Teaching. Mr. J. P. Naik observes, "Apart from its economic value as a means of raising the teacher-pupil ratio, it is possible to argue, on purely educational grounds, that the monitorial system is a good device that should have much wider recognition and use at our hands.. Even its worst opponents would find it difficult to deny that it makes things easy for the teacher when obstinate economic factors make the ratio of pupil to teacher large, and when the existence of small villages superimposes an additional difficulty, viz., the need to handle a number of classes simultaneously. Moreover, it has several advantages for the pupils as well. Like the quality of mercy it is twice blessed: It blesses him that teaches as well as him that learns: and once the "rapport" between the pupils concerned is established, it makes learning a playful adventure with fellow comrades and fully compensates for all the deficiencies of the child-teacher's lack of professional training and technique. Within the domain of formal instruction it may be described, by a slight variation of a common slogan, as the method of "learning by teaching"; and it has been recently revived in an altogether unexpected context by the well-known educationist missionary, Dr. Frank Lauback, who devised the method of "each one, teach one" to spread literacy among adults. At any rate, it would certainly be wrong to set the monitorial system aside as "crude and antediluvian" without a further enquiry".

Single-teacher institution enjoyed a robust health in the rural as well as in the urban areas up to the year 1855. Following the Charter Act of 1813, the new system also adopted the tradition of single-teacher school as a 'modus operandi'. In fact teachers were paid on the basis of the number of pupils i.e., Rs. 10 for schools of 50 children or less; Rs. 12 for 50 to 78 children; Rs. 15 for 70 to 90 children; and Rs. 20 for schools with more than 90 pupils. In 1855, almost all the government primary schools in the State of Bombay were single-teacher institutions. There is adequate evidence available to show that single-teacher primary schools were the order of the day in the modern system of education prior to 1855.

Decline of Single-Teacher Schools. The period between 1855 and 1921 was marked by the decline of this institutions. This period saw the supreme authority of the Education Departments which were following the English pattern of education. Following factors were responsible for their decline :

- (i) Pressure of numbers in schools.
- (ii) The abandonment of the monitorial system.
- (iii) Introduction of 'classes' with graded curricula.
- (iv) Annual promotions.
- (v) Village schools were also asked to follow the urban pattern.

Period of Controversy (1921-1947). The Royal Commission on Agriculture Stated.

"We entirely agree", they wrote, "with those educational authorities who hold that no primary school can be efficient which has less than two teachers. Unless the school can be efficient which has at present one teacher and can be provided with an additional teacher or converted into a branch school consisting of one or two classes only, with the object of providing teaching for young children until they are old enough to walk to the central school, it is better closed, for it is both ineffective and extravagant. We realise, that financial considerations militate against the provision of a second teacher for the small primary school. It is estimated that the minimum number of pupils required for the primary school from the point of view of economical administration is about a hundred, whereas the average number attending each primary school at the end of 1925-26 was only 43. But nothing is to be gained by failure to face the fact that a village which has a primary school with only one teacher might almost as well be without a school at all. We, therefore, recommend that, wherever possible, the policy of establishing 'central' schools and of converting 'single teacher' schools into 'branch' schools should be adopted."

Single-teacher schools received valuable support from J. A. Richey who wrote an article in the 'Asiatic Review'. January 1929, Shri N. S. Subba Rao, the Director of Public Instructions in Mysore, Mr. R. Littlehails who at the invitation of the State Government, submitted a detailed report on the reconstruction of education in Baroda and Shri R. V. Parulekar.

Problems of These Schools

1. Delicate Role of the Teacher. J. P. Naik describes the situation in these words. "But when the single-teacher of a rural school was asked to adopt the plan, superhuman difficulties stared him in the face. He had to manage four or five classes at a time: arrange a time-table for each class according to subjects and periods; and try to keep every pupil as fully busy as possible throughout the school period. His task, therefore, was like that of a chess player who had to play a number of games simultaneously. In fact it was even more strenuous because children are more difficult to manage than chess-pieces."

2. Posting and Transfers of Teachers. Because of lack of facilities teachers do not like to work in such schools with the result that there are frequent transfers. This difficulty may be removed by stressing the following methods :—

(a) As a rule, it may be laid down that every teacher must put in a minimum of service at such places.

(b) Transfers to such places should not be regarded as form of punishment.

3. Grant of Leave. This seems to be a formidable problem. Just imagine, if the teacher of single school goes on leave, the institution just comes to a stand still. It is not possible to eliminate altogether chances of such closure but can be minimised to a considerable extent. The single-teacher schools in a district should be divided into convenient groups of about 20. A big full-fledged primary school should be selected to serve as the controlling school and an additional teacher should be attached hereto. Whenever a teacher of a single-teacher school goes on leave more than one day's duration, he should inform the headmaster of the controlling school who would send the relieving teacher. Financial considerations should not be allowed to have their sway. When additional teachers could be provided to government-aided schools at places like Delhi, there is no reason that the rural areas should be allowed to suffer on this account. Sometimes it is recommended that the headmaster of the central school, irrespective of additional teachers, should send one of his assistants to conduct the single-teacher school. On the face of it such a suggestion seems to be good one but it amounts to the loss of efficiency of the central school. Constant demands for substitutes are bound to have an adverse effect on this school.

4. Training. There does not seem to be an appreciable difference in the training required for teaching in these schools and schools having many teachers. In the towns, we are faced with larger classes and a teacher is expected to teach students of varying abilities in the same class. Such a situation seems to be quite similar to that of a single-teacher school where a teacher has to deal with same number of students in different classes. Of course, it must be admitted that situation is not exactly identical. Our training colleges must provide opportunities to the students under training to handle the problems of a single-teacher school. Perhaps there is not a single-teacher school attached to a training college for 'practice purpose.' The situation calls for rethinking on the problem. Refresher courses may also be conducted for the untrained teachers working in such schools and attempts made to understand their problems in the right perspective.

5. Supervision. Whether the supervision is done by the headmaster of the central school or an inspecting officer, it must be adequate, progressive and enlightened.

6. Instructional Problems.

The following methods are suggested for facilitating the work of teachers :—

(i) *Combination of Grades.* It is suggested that the burden of a solitary teacher may be lightened by reducing the number of grades so commonly adopted in the U.S.A.

(ii) *Plural-Class Teaching.* All grades may be combined for physical training and more lessons. Each grade may be taken up separately in spelling, writing, arithmetic, etc.

Different combinations depending upon the situation may be worked out.

(iii) *Monitorial System.* J. P. Naik observes, "This is really our system and is eminently suited to the needs of a poor, rural, and agricultural country like ours. We gave it to the West and it was a grievous administrative error to abandon it under a lead from an urban, industrialised and rich country like England. We must, therefore, readopt it because it has the power to make our single-teacher schools much better than they are at present."

A careful selection of monitors, rational and intelligent allotment of duties, and a practical training would go a long way in deriving maximum benefits out of this institution.

7. *Arrangement of the Time-Table.* A judicious grouping of lessons should be done. Time should be equitably divided between the different grades or classes. The teacher would be required to make use of the following approaches :

(a) One grade to be left to work on its own for a particular period.

(b) A monitor would be required to take charge of another grade in the same period.

(c) The teacher himself may take up the third grade.

Such methods will have to be worked out very carefully and intelligently.

Wofford suggests for the consideration of teachers the following guiding principles in programme making :—

(i) The programme should be planned so that each child and each group has an equitable distribution of the teacher's time.

(ii) The organisation of the school should be such that a fair allotment of time is made on a basis of subjects and subject matter. What is a fair allotment would have to be decided on the basis of the needs of children.

(iii) Every good programme should provide for time to study and play as well as recite.

(iv) It should always be kept in mind that the programme is made to serve children, not to be served by them.

8. *Shift System.* Of the four primary classes, a teacher may handle two classes for about three hours at a time. Morning assembly, physical education and moral teaching, etc., may be taken up collectively.

9. *Individual Instruction.* Attempts may be made to try various projects from time to time in various classes simultaneously or at some suitable intervals.

10. Experimental and Research Problems

(a) Experimental single-teacher schools should be organised, their problems studied and solutions found.

(b) Single-teacher schools should be used for teaching practices also.

(c) A careful study of the working of single-teacher schools in Australia, U.S.A. and Sweden may be undertaken and attempts made to understand their working.

(d) Universities, educational departments and suitable agencies may be asked to undertake research and experimentation in this field.

A high priority must be given in our programme of educational reconstruction to these problems. As regards their existence, there is no doubt that they are going to remain with us 'as the only agency of spreading culture' in more than half of our five lakhs of villages.

Number of Single Teacher Schools

<i>Year</i>	<i>Number</i>
1950-51	68,841
1951-52	71,361
1952-53	75,214
1953-54	86,031
1954-55	10,1,342
1955-56	1,11,220
1956-57	1,16,272
1957-58	1,23,248
1958-59	1,26,238
1959-60	1,38,993

Basic Education

Importance of Basic Education

In the words of University Education Commission. "At this fateful moment in our history, we have the extreme good fortune to have had presented to us a pattern and philosophy of education of such universal and fundamental worth that it may well serve as the type for bringing into being the new India which is the desire of many of us. We have no sympathy with hero worship and feel that there should be no withholding of criticism of an educational plan because it was presented by our great leader. With some details of Gandhiji's programme of basic education we may not agree. However, taking his concept as a whole it presents the seeds of a method for the fulfilment and refinement of human personality, the wisdom and excellence of which will become more apparent through the years, and will stand the test of time and of criticism. Years of time and vast effort will be required to insure this movement against warped and mistaken expression and to develop effective skills and methods ; yet inherently the concept is one of the world's great contributions to education.

The Method outlined in its rudiments by Gandhiji is not just a way of meeting the educational needs of little children. He has stated the essential elements of a universal method of education, from the time a little child shares in its mother's work, through the whole process of growth of personality to the time when the mature man of disciplined mind and character works at the side of the master in the achievement of a great design. The essence of this philosophy is that education should combine practice in the every day processes of living and working, with more formal training. This is a fundamental concept which is steadily gaining support and application in the educational world.

Gandhiji was not the first to have this vision. Aristotle, Francis Bacon, Milton and Louis Agassiz are among the world's great men

who specially expressed a similar conviction. But in one important respect he differed from most of the others. While their minds caught the vision of a new day, the bookishness of their lives held some of them captive. Therein is Gandhiji's pre-eminence. No sooner was a conviction matured in his mind than he acted on it."

Meaning of Basic Education

In October 1937, at a conference of national workers at Wardha under the Chairmanship of Gandhiji his ideas were considered and the following resolutions passed which became the fundamental features of the scheme :—

(a) That in the opinion of the conference free and compulsory education be provided for seven years on a nation-wide scale.

(b) That the medium of instruction be the mother-tongue.

(c) That the conference endorses the proposal made by Mahatma Gandhi that the process of education throughout this period should centre round some form of manual productive work, and that all the other abilities to be developed or training to be given should, as far as possible, be integrally related to the central handicraft chosen with due regard to the environment of the child.

(d) That the conference expects that this system of education will be gradually able to cover the remuneration of the teachers.

A committee was appointed under the Chairmanship of Dr. Zakir Husain to prepare a detailed syllabus on the lines of the above resolutions.

Since the publication of the Zakir Husain Committee Report, there have been long and continuous debates on the utility of basic education system, the duration, the nature and contents of the syllabus. At long last it has been decided that the Basic Education is the most appropriate pattern of education for the whole country.

The fundamental features of the scheme, having undergone lot of change, are as follows :

(a) A school of say $5\frac{1}{2}$ hours could roughly be divided on the following basis :—

Physical activities.....20 minutes

Mother Tongue.....40 minutes

Social Studies and

General Science.....60 minutes

Art.....40 minutes

Arithmetic.....20 minutes

Craft work including study of

correlated subjects..... $2\frac{1}{2}$ hours

Thus the craft work will have $2\frac{1}{2}$ hours instead of 3 hours and 20 minutes.

(b) Free and compulsory education to be given in 8 years (from 6 to 14 years) in two stages, instead of 7 to 14. The junior stage will cover five years and the senior 3 years.

(c) The medium of instruction is to be the mother-tongue.

(d) Education is to centre round some form of productive work. The social and physical environment should be used for correlation in addition to craft.

(e) The self-supporting aspect is not to be over-emphasised. The sale-proceeds of the finished goods should be able to help the school to cover some parts of its expenditure.

(f) External examinations are to be abolished. The day-to-day work of the students is to be the determining factor.

(g) Text-books to be avoided as far as possible.

(h) Cleanliness and health, citizenship, play and recreation are to be given sufficient importance.

Why Gandhiji introduced this Scheme ?

It is admitted by everybody that the system of education introduced by Macaulay is out-moded and out-dated. Gandhiji realised fully that the traditional system is unreal and artificial. He said, "I am convinced that the present system of education is not only wasteful but positively harmful. Most of the boys are lost to the parents and to the occupations to which they were born. They pick up evil habits, effect urban ways and get a smattering of something which may be anything but education." Gandhiji again feels, "The present system of education does not meet the requirements of the country in any shape or form. English has been made medium of education in all the highest branches of learning, has created a permanent bar between the highly educated few and the uneducated many". He further adds, "We have up to now concentrated an stuffing children's minds with all kinds of information without even thinking or stimulating or developing them. Let us now cry a halt and concentrate on educating the child properly through manual work not as a side activity but as a prime means of intellectual activity".

Following defects were clearly visible in the system of education introduced by the British in India :—

1. It was an un-Indian system of education.
2. It was an urban system of education in a rural country.
3. The curriculum was English dominated.
4. The system was too literary and bookish.
5. The system neglected citizenship training.
6. The system was very wasteful.
7. The system following a single track.

8. The system was unplanned.
9. The system was very expensive.
10. The system was not in accordance with the needs of a secular democratic country.

Basic education aimed at removing the defects.

Gandhiji wanted to make education self-sufficient, otherwise the teeming millions of India could not be educated.

Certain Distinctive Merits of Basic Education

"This basic education", according to a pamphlet published by the Ministry of Education, "is not only a valuable and integral part of the priceless legacy that Mahatma Gandhi left to the nation, but embodies certain educational ideas and principles of great significance that have been welcomed and endorsed by distinguished and discerning educationists in India and abroad." "Economically considered, carried out intelligently and efficiently, the scheme will increase the productive capacity of our workers, and will enable them to utilise leisure advantageously," reported the Zakir Husain Committee.

The Basic Education has the following certain distinctive merits :—

1. **Child-Centered Education.** In the words of an eminent educationist, "The Basic system regards the child as the educational consumer whose needs must be studied and understood, catered and fulfilled." All the great educationists like Rousseau, Pestalozzi, Froebel, Herbert, Dewey, etc., emphasised that top priority should be given to the child—his nature, needs and interests.

2. **Learning by Doing.** Learning by doing sums up the educational methods of Basic education. It is absolutely wrong to think that true education is acquired from books alone. There are other methods and sources which are more helpful in acquiring true knowledge. 'Chalk' and 'talk' lessons are also not very useful. All educationists have condemned bookish knowledge. Gandhiji believed that school must be a doing thing. In basic system of education children acquire the knowledge of the formal school subjects as a bye-product of purposeful activities.

3. **Craft as the Core of the Basic Plan.** Craft is the medium of education in the Basic system. Gandhiji writes, "The core of my suggestion is that handicrafts are not to be taught, not merely for productive work but for developing the intellect of the pupils." According to his view "stress should be laid on the principles of co-operative activity, planning, accuracy, initiative and individual responsibility in learning." According to him "the process of education should be imparted through some handicraft or industry."

4. Self-supporting Aspect. "Earn while you learn" is another feature of the plan. The idea of a self-sufficient basic school has a special significance in a poor country like India. Without self-sufficient schools it is very doubtful if we could fulfil the obligation to our Constitution of providing free and compulsory education to all the boys and girls of school-going age. In the absence of such schools we may have to wait for many, many decades to provide education to such a group.

5. Integrated Knowledge. Basic education treats knowledge as an integrated whole. Curriculum is built round three integrally related centres : (1) Physical environment, (2) Social environment, (3) Craft work.

6. Relationship with Life. A Basic school must become an active environment where teaching is not cut off from the life of the community. There is to be a constant two-way traffic between the miniature community of the school and the community itself. Education is to be directed to the needs of life. It is not to pursue an idea which has no relation with or is totally isolated from the real situations of life.

7. Training in Citizenship. Basic education aims at developing ideas of mutual understanding and habits of co-operative and mutually helpful living among the students through its various practical and constructive programmes. The new education aims at giving the citizens of the future a keen sense of personal warmth, dignity and efficiency. It is likely to strengthen in them the desire for self-improvement and social service in a co-operative community.

8. Free and Compulsory Education for Seven Years. By free and compulsory education we mean an education for which parents will not have to pay any fee and for which they must send their children to school.

Gandhiji writes, "Primary education extending over a period of 7 years or longer, and covering all the subjects up to the matriculation standard except English, plus a vocation used as a vehicle for drawing out the minds of boys and girls in all departments of knowledge should take the place of what passes today under the name of primary, middle and high school education."

9. Emphasis on Mother-Tongue. Gandhiji stressed that proper education can only be imparted through the mother-tongue. Foreign tongue as the medium of instruction makes us unfit for original work. It makes us crammers and imitators. Dr. Zakir Husain Committee observes, "The proper teaching of the mother-tongue is the foundation of all education. Without the capacity to speak effectively and to read and write correctly and lucidly, no one can develop precision of thought or clarity of ideas. Moreover, it is a means of introducing the child to the rich heritage of his people's ideas, emotions and aspirations and can, therefore, be made a valuable means

of social education, whilst also instilling right ethical and moral values. Also, it is a natural outlet for the expression of the child's aesthetic sense and application and if the proper approach is adopted the study of literature becomes a source of joy and creative appreciation."

10. Greater Freedom for the Teacher and the Taught. In Basic education discipline does not mean order and external restraint but an intelligent use of freedom.

The teacher gets many opportunities to make experiments, think for himself and put his ideas and plans into practice.

11. Basic Education is not a Class Education. The ultimate objective of Basic education is to create a social order in which there is no unnatural division between 'haves' and 'have-nots' and every one is assured of a living wage and the right to freedom.

12. Basic Education in the Rural as well as in Urban Areas. It is wrong to assume that Basic education is intended to be imparted in the rural area only. "In fact, in one sense there is a greater need for Basic education in urban areas than in rural areas. In rural areas the children who participate in the life of the farm or allied occupation of their families have certain types of further education. In performing their jobs the children come into direct contact with actual life and the experiences they get, form the basis of further education. On the other hand, in large towns and big industrial cities the children miss the opportunities of rich experiences and direct contact with life", observed Dr. K. L. Shrimali. Basic education is a plan of national education for the whole country including both rural as well as urban areas. Keeping in view the educative possibilities of a craft in relation to local needs, curriculum may differ from region to region. There is no rigidity in the curriculum of Basic education. However, it will be wrong to think that rural children should have altogether a different type of education from urban children. Difference will be of a degree and not of kind. Basic principles of life are the same everywhere.

Significance of the Word 'Basic'. The word 'Basic' is derived from the word 'Base' which means the bottom or the foundation of a thing upon which the whole thing rests or is made.

It is basic because it is based on ancient Indian culture.

It is basic because it lays down the minimum educational standards which every Indian child is entitled to receive without any distinction of caste or creed.

It is basic because it is closely related to the basic needs and interests of the child.

It is basic because it makes use of the native potentialities of the child.

It is basic because it is intimately related to the basic occupations of the community.

It is basic because it is for the common man of the country, who is the foundation and the backbone of our national life.

It is basic because it comes first in time i.e., it is the primary period of one's education.

Criticism of Basic Education

1. Based on Unsound Psychological Foundations. "The delicate but inexorable laws governing the development of the tender mind of the child have been completely ignored. The child is treated just as a policeman or a soldier, is merely as a unit in a homogeneous mass. His precious individuality is ignored. He is viewed merely as a means to an end—the end being earning capacity and citizenship of sorts."—*P. S. Naidu*.

"In the Wardha scheme of training for teachers child psychology is conspicuous by its absence."—*P. S. Naidu*.

"Play is the only means by which creative energy can be released. Enlightened and informed educational opinion all over the civilised world is decidedly against forcing the child to learn a craft before he is twelve plus. It is nothing short of cruelty to make the child earn an anna or half an anna per hour during the stage when he ought to be playing and enjoying himself."—*P. S. Naidu*.

"There are three aspects of human nature—cognitive, affective and conative. The Wardha scheme emphasises the last aspect piously hoping that the student will willy-nilly get trained in the first through his training in the last. The middle aspect is completely ignored."—*P. S. Naidu*.

2. Craft as the only Basis of Correlation. "It is impossible to establish any natural association between craft and all the subjects of cultural value which any sane system of education should cover through its curriculum. Teaching should be concrete and should be based on the child's active experiences in his environment. But it is absurd to hang all knowledge from the peg of a single craft."—*P. S. Naidu*.

"The essence of Basic education is that it is learning by doing, that it is activity-centred, that it is craft-centred, everything cannot be taught through crafts or practical activities."—*Editor, Educational Review*.

3. Ignores National Genius. "Education suited to our national genius should have a definite religious bias, with contempt of worldly pursuits in its core. Craft centered education is decidedly alien to our ancient ideals."—*P. S. Naidu*.

4. Basic Education not Suited in an Age of Industrialisation. "The Second Five-Year Plan and the policy of the Government of India as a whole are concerned with industrialisation of the country. It is not necessary to labour the point that Basic education is a concept which runs counter to such a policy. As ours is a system of

education which claims to produce an integrated individual, the emphasis on craft is out of place in a community which has its face turned towards developing its economy to the full. So far discussion on Basic Education have failed to relate to the economic policy of the State. But if this point is ignored, we shall find ourselves burdened with an educational system which turns out misfits even more rapidly than the one with which we are so dissatisfied.”—*S. Natarajan.*

“With rapid industrialisation of India knowledge of science and mathematics may become more desirable than skill in handicrafts.”—*Editorial, Educational Review.*

5. Ruinous Competition. “This scheme will hit the professional artisans hard by creating ruinous competitions.”—*P. S. Naidu.*

6. Deficient Working of Basic Schools. “There is some loss in mechanical arithmetic and spelling lack of sufficient intensive and repetitive drill.”—*J. Lahri.*

“Two types of Basic education have ultimately crystallised : The orthodox Wardha type of eight years craft-centred Basic schools and the more liberal craft-biased but activity type of Basic schools in two stages, viz., Junior Basic stage of 6 to 11 plus and Senior Basic stage up to 14 plus with the result that at the moment we find two types sponsored by the different stages.”—*J. Lahri.*

7. Neglects the Child. “In a hurry to pay more attention to craft, it has neglected the child.”—*Anath Nath Basu.*

“Basic education is looked upon more as a social and economic duty than as a joyful adventure.”—*Anath Nath Basu.*

“Craft is only a slogan, a fiction, which is practised on ceremonial occasions for the benefit of visitors.”—*R. K. Singh.*

8. Faulty Time-Table. “In a Basic school only two-thirds or half the normal time is given to academic education. The rest being taken up by crafts. And further, since on the time-table academic subjects generally come after the craft work, mostly agriculture, students are sometimes too tired to take to academic work kindly.”—*R. K. Singh.*

9. Secondary Importance to Literacy and Knowledge. “Literacy and knowledge of subject matter are considered to be of secondary importance.”—*R. K. Singh.*

10. No Dexterity in any Craft. “Students spend one-third or half the time for craft work without acquiring any dexterity worth speaking of in any craft.”—*R. K. Singh.*

“A careful study of what is taking place in the Basic schools of today has revealed that the teaching in such schools has less emphasis on the quantum of knowledge stipulated to be conveyed to the children during particular periods.”—*Editorial, Educational Review.*

Some Epithets attached with Basic System of Education

1. Basic Education is a FAD. It has no sound psychological and pedagogical basis.
2. Basic Education is a FALLACY. The very fundamentals are wrong and not properly conceived.
3. Basic Education is a FARCE. The scheme is impracticable. Traditional methods are still followed. The craft materials are just stored and a show is put up, whenever there are visitors.
4. Basic Education is a FRAUD, which is being committed on the nation by those who are in power. It is a sort of political stunt to play with the sentiments of the people.

Basic System of Education as the National System of Education

Basic education has been accepted as the national pattern of education at the elementary stage. Ultimately, all schools are to be converted to this pattern.

Systematic efforts for its development started with the First Five-Year Plan when a number of schemes of intensive development in selective areas incorporating a project of establishing a group of experimental and closely integrated Basic institutions from the Junior Basic School to the Post-Graduate Basic institutions, from the Junior Basic School to the Post-Graduate Basic training colleges were started. Besides, the Union Government set up in 1956 the National Institute of Basic Education at New Delhi. The Institute has been conducting research studies and investigations on various aspects of Basic Education, and set up a number of extension service centres in several teacher training institutions.

Summary of the Recommendations of the Assessment Committee on Basic Education

In 1956, the Government of India appointed Assessment Committee on Basic Education to survey the existing situation regarding Basic Education in the various states and to think out ways and means of bringing about effective improvements. The Committee visited eleven States and they tried to assess Basic Education at various levels. The recommendations of the Committee are given under seven headings.

1. The Role of the Government of India.
2. The Governments of the States.
3. The Universities.
4. The Administration.
5. Basic Teachers' Training.
6. Basic Schools.
7. The Public.

The major recommendations of the Committee are given below :

- (1) A Central Research Institute of Basic Education should be established.
- (2) Post-Basic Education should get due recognition and place in the present scheme for the reorganisation of secondary education.
- (3) All elementary schools should be converted into basic schools and all teacher training at this level should become basic teacher training.
- (4) Universities should recognise Post-Basic Education for purposes of admitting pupils passing out of Post-Basic schools.
- (5) English should be offered as an optional subject from the 6th grade onwards, wherever knowledge of English is considered necessary.
- (6) The Basic Teachers' Training should become more efficient and real by effecting improvement in craft training and in a new dynamic approach to the study of psychology.
- (7) No school should be considered a basic school unless it provides for an integrated course of eight years of Basic Education, community living, systematic craft work, correlated method of teaching, extension work, congregational prayers, library, cultural and recreational activities, etc.

Future of Basic Education and the Education Commission

The Commission believed that the essential elements of Basic education were fundamentally sound, but some modifications were needed :

"The movement of basic education launched by Mahatma Gandhi more than 25 years ago, proposing a new type of elementary education for the nation which would centre round some form of manual and productive work and have intimate links with the life of the community, was a landmark in the history of education in India. It was a revolt against the sterile, book-centred, examination-oriented system of education that had developed along traditional lines during several decades of British rule. It created a national ferment, which may not have transformed the quality of education at the primary stage, but which has certainly left its impact on educational thought and practice on a much wider sphere. We believe that the essential elements of the system are fundamentally sound, and that with necessary modifications these can form a part of education, not only at the primary stage but at all stages in our national system. These elements are : (1) productive activity in education ; (2) correlation of the curriculum with the productive activity and the physical and social

environment ; and (3) intimate contact between the school and the local community.”

The Commission popularised the concept of ‘work experience’ and saw that the two ideas—work experience and basic education—were essentially similar :

“In the curricula of most contemporary school systems, particularly in the socialist countries of Europe, a place is found for what is variously called ‘manual work’ or ‘work-experience’. In our country, a revolutionary experiment was launched by Mahatma Gandhi in the form of basic education. The concept of work experience is essentially similar. It may be described as a redefinition of his educational thinking in terms of a society launched on the road to industrialisation.”

The Commission gave a call for the reorientation of the basic education programme in view of the changed character and need of the new society. It is not difficult to miss the clear shift of emphasis in terms of a new science-oriented social order in the following words :

“The programme of basic education did involve work-experience for all children in the primary schools, though the activities proposed were concerned with the indigenous crafts and the village employment patterns. If in practice basic education has become largely frozen around certain crafts, there is no denying the fact that it always stressed the vital principle of relating education to productivity. What is now needed is a reorientation of the basic education programme to the needs of a society that has to be transformed with the help of science and technology. In other words, work-experience must be forward looking in keeping with the character of the new social order.”

Five-Year Plans

Since the Government of India had earlier accepted basic education as the national system of education, sincere efforts were made in all directions to popularise it. A systematic effort to encourage basic education was made in the First Plan and a number of schemes on all-India basis were launched. The pace of progress increased in the Second Plan. The progress was maintained in the Third Plan, but a luke-warm attitude was creeping in as a result of some opposition from public quarters. The progress of basic education in the three plans is set out below :

<i>Schools</i>	<i>1st Plan</i>	<i>2nd Plan</i>	<i>3rd Plan</i>	<i>4th Plan</i>
Junior basic schools	33,379	42,971	1,00,000	1,53,000
As percentage of total primary schools	15·9	15·4	29·2	30·9
Senior basic schools	388	4,842	11,940	16,700
As percentage of total middle schools	2·9	22·3	30·2	28·9
Basic training schools	114	520	715	1,424
As percentage of total number of training schools	15	56	70	100

After the *Report of the Education Commission* (1964-66) the phrase 'work-experience' came in more frequent use than that of 'basic education'. The Government of India's Resolution on National policy of education (1968) has not made any mention of 'basic education'. It, however, declares that work-experience should become an integral part of education. The Fourth Five-Year Plan (1969-74), does not deal with the term 'basic education'. No new programme for its development and research is being taken up. In the list of *Allocations and Major Programmes for Education* (1970), no share has been given to basic education.

The National Institute of Basic Education set up by the Government of India, which functioned as an important department of NCERT for the purpose of research, extension and training in basic education, has been wound up.

Work-Experience

The Education Commission has defined work-experience as "participation in productive work in school, in the home, in a workshop, on a farm, in a factory or in any other productive situation." It is clear that the productive work should be under conditions approximating to those found in real life situations. The following programmes of work-experience for the different stages to suit the age and maturity of the pupils have been suggested by the Commission :

"In the lower classes of the primary school, work-experience may begin as simple handwork, the objective being to train children to make use of their hands and thereby help their intellectual and emotional growth. In the senior classes, it may take the form of learning a craft which develops technical thinking and creative capacities in the pupils. Even here, however, some work-experience can be provided in real life situations, such as work on the farms at the time of harvesting or sowing or in a family production unit, and opportunities for this kind of activity should be utilised to the maximum extent possible. As a workshop is proposed to be attached to every school or group of secondary schools in a phased programme spread over the next ten years, work-experience at the lower secondary stage can take the form of workshop training. At the higher secondary stage, where the students will be more mature, and their numbers will be comparatively smaller, work-experience should be made available in school workshops and also on farms and in industrial or commercial establishments."

National Seminar on Primary and Work-Oriented Education (1970)

(1) The Seminar emphasised the need to spell out the details pertaining to the following aspects of work-experience:

(a) Formulation of the operational concept of work-experience.

- (b) Types of work-experience programmes to be introduced during 1970's in the country.
- (c) Minimum work-experience programmes to be introduced in all schools in the country with stress on structured activities to be introduced in selected schools.
- (d) Action programmes pertaining to production of curriculum materials.
- (e) The pre-service and in-service training geared to work-experience to be provided to teachers and supervisors.
- (f) Steps to be taken for mobilisation of public opinion in favour of work-experience.

(2) The Seminar endorsed the view that work-experience should be socially meaningful, realistic, physical work—without over-emphasis on economic aspects at the cost of learning outcomes.

(3) The Seminar pointed out that individual schools might be encouraged to develop their own programmes of work-experience.

(4) The Seminar stressed the need to develop a minimum work-experience programme suitable to each State.

Educational Structure and Twelve Years of Schooling

Educational Structure

Recommendations of the Secondary Education Commission (1952-53)

The Secondary Education Commission made certain confusing statements as indicated in the report at pages 16 and 31. On page 16, while summarising the recommendations of the University Education Commission they said : "The Commission which had to report primarily on University Education in India had necessarily to review the position of Secondary Education as well and it made certain notable suggestions. The Commission recommended that the standard of admission to University courses should correspond to that of the present Intermediate examination. *i.e.*, after 12 years of the study at school and Intermediate College. The Commission thought it unfortunate that neither the public nor the Government had realised the importance of Intermediate colleges in the Indian educational system and remarked that our Secondary Education remains the weakest link in our educational machinery and needs urgent reforms".

Further, they said : "We have, therefore, come to the conclusion—which also tallies with the view of the University Education Commission in this connection—that it is desirable to abolish the present Intermediate stage, to increase the period of secondary education by one year and to plan a three-year degree course at the University stage".

The recommendation is as follows :

"Keeping this broad outline in view, we recommend the following new organisational structure for secondary education after the 4 or 5 years of Primary or Junior Basic Education :

(i) A middle or Junior Secondary or Senior Basic stage which should cover a period of 3 years.

(ii) A Higher Secondary stage which should cover a period of four years".

**Existing and Proposed Nomenclature for Various Stages of Education
(Education Commission 1964-66)**

Existing Nomenclature

Proposed Nomenclature

School Education

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. (a) Pre-Primary (b) Pre-Basic (c) Kindergarten (d) Montessori, etc. <ol style="list-style-type: none"> 2. (a) Primary in some States
(e.g. Punjab) (b) Lower Primary in some States (e.g. Gujarat) (c) Junior Basic (d) Lower Elementary in some States (e.g. Madras) <ol style="list-style-type: none"> 3. (a) Middle in some States
(e.g. Punjab) (b) Junior High School
(e.g. U.P.) (c) Upper Primary in some States (e.g. Gujarat) (d) Senior Basic (e) Higher Elementary in some States (e.g. Madras)
High School, Higher Secondary School <p>This includes class XI or PUC in some States (e.g. Rajasthan)</p> <p>It will include junior colleges in Kerala</p> <p>It will also include terms like pre-professional, pre-medical and pre-engineering.</p> | <ol style="list-style-type: none"> 1. Pre-Primary <ol style="list-style-type: none"> 2. Primary (Classes I—VII or I—VIII) <ol style="list-style-type: none"> (a) Lower Primary
(Classes I—IV or I—V) (b) Higher Primary
Classes V—VII or VI—VIII) <ol style="list-style-type: none"> 3. Secondary
(Classes VIII—XII or IX—XII) <ol style="list-style-type: none"> (a) Lower Secondary Education
(Classes VIII—X or IX—X) (b) Higher Secondary Education
(Classes XI—XII) |
|--|---|

Higher Education

- | | |
|---|--------------------------|
| 4. All degrees which lead to professional qualifications (e.g. M.A. ; M.Sc. ; M.Com. ; B.E. ; M.B.B.S. ; B.T. ; LL.B. ; B.Ag. etc.) | 4. Professional Degrees. |
| 5. All degrees other than professional ones. | 5. General Degrees. |
| 6. All courses leading to the first degree. | 6. Undergraduate. |
| 7. All courses beyond the first degree (excluding certain first degrees given after the first degree e.g. B.Ed.). | 7. Post-Graduate. |

General

This includes pre-school and Primary education.

This includes high school and higher secondary education.

This includes undergraduate and post-graduate education and research.

First level of education

Second level of education

Third level of education.

Recommendations of the Education Commission (1964-66)

The Commission suggested the following :

1. The new educational structure will consist of
 - (a) One to three years of pre-school education.
 - (b) A primary stage of 7 to 8 years divided into a lower primary stage of 4 or 5 years and a higher primary stage of 3 or 2 years.
 - (c) A lower secondary stage of 3 or 2 years.
 - (d) A higher secondary stage of two years of general education or one to three years of vocational education.
 - (e) A higher education stage having a course of three years or more for the first degree and followed by a course for the second or research degree of varying durations.
2. Age of admission to class I ordinarily not to be less than 6.
3. First public examination to come at the end of first ten years of schooling.
4. The system of streaming in school of general education to be made beyond class X.
5. Two types of secondary schools, high schools providing a

ten-year course and higher secondary schools providing a course of 11 or 12 years.

6. Bigger schools and more efficient schools—about one-fourth of the total number to be upgraded and attempts to upgrade every secondary school to the higher secondary stage to be abandoned.

7. New higher secondary course beginning in class XI, to be instituted and class XI and XII to provide specialised studies in different subjects; existing higher secondary schools with integrated courses in classes IX, X and XI and running satisfactorily to continue until class XII is added.

8. Transfer of the pre-university course from the universities and affiliated colleges to secondary schools by 1975-76 and the duration of the course to be lengthened to two years by 1985-86; U.G.C. being responsible for effecting the transfer of all pre-university or intermediate work from university and affiliated colleges to schools.

9. Starting of Higher Secondary class or classes in selected schools by State Education Departments, as self-contained units, and assisted with adequate recurring grants.

10. Reconstituting Boards of Secondary Education to accept the responsibility for the higher secondary stage also.

11. Vocationalisation at the secondary stage at two points at the end of Class VII (VIII) and at the end of Class X and provision to be made for the introduction of different types of vocational courses at the lower and higher secondary stages, the duration of these courses to vary from one to three years which would prepare young persons for employment.

WHY 12 YEARS OF SCHOOLING ? HISTORICAL SURVEY

The Sadler Commission (1919)

Advantages Claimed

1. "We regard the proposals to institute intermediate colleges as the very pivot of our whole scheme or reform".

2. "The intermediate college must be regarded as fulfilling a double purpose. In the first place, it must provide a training such as will qualify its students for admission to the University, in all its faculties or into other institutions for higher or technological training. In the second place, it must provide a training suitable for students who, after completing their course, will proceed direct into various practical occupations. As the system develops we should expect to find an increasing number of students entering upon the intermediate course solely with a view to preparing themselves for various practical careers".

3. "One of the most fundamental distinctions between the intermediate college and the present intermediate classes must be

that the intermediate college will use the method of a good school, in classes of reasonable size wherein question and answer will be possible rather than methods of the mass-lecture."

4. "Since a primary aim of the course in the intermediate college is to give the student a liberal education, there must be a common element in all forms which this course may assume. And the most essential parts of this common element must obviously be a training in the media of self-expression, and of exact and clear thinking".

5. "We regard the creation of well-organised intermediate colleges—in some cases, with the upper classes of high schools, and in others serving as the crown of all the high schools of their districts—as the most immediately valuable reform which can be undertaken in the educational sphere".

The Commission was of the view that intermediate examination should be the qualifying test for entry into a university.

The Radhakrishnan Commission (1949)

1. "The standard of admission to the university courses should correspond to that of the present intermediate examination i.e., after the completion of 12 years of study at a school and an intermediate college."

2. "In each province a large number of well-equipped and well-staffed intermediate colleges (with classes IX to XII or VI to XII) be established.

The Secondary Education Commission (1953).

(already discussed) **The Panel on Education of the Planning Commission (August 1960)**

"The duration of the school course should be 12 years and not 11 years so that the total span of education from primary to higher education level should be 15 years (12+3) instead of 14 (11+3) as it was very desirable that mature students of the age of 18 should go to the university. An argument in support of this was that this had been the recommendation of the Sadler Commission and the University Education Commission and that 11-year course of school education had been accepted as an ill-considered compromise."

The Committee on Emotional Integration (Dr. Sampurnanand Committee) (1962)

Definition of the Secondary Stage of Education. "Before dealing in detail with certain aspects of this stage of education, we consider it desirable to define the period of education designated as 'Secondary'. At present it is not even clear where the stage of secondary education begins, whether it is after the first five years of primary school or after the VII or VIII standard. It is necessary that the broad general pattern of education should be more or less the same throughout the country. We are of the opinion that secondary education should be defined as all types of education for pupils beyond the 8-year primary stage up to the age of 18 or the

time of joining an institution of higher learning. Secondary education, according to this definition, will include all education—

- (a) at the high school stage (standard IX-X) and
- (b) at the higher secondary stage (standard XI-XII)."

"Education provided in trade and industrial schools, and apprenticeship courses for the stages, indicated in (a) and (b) including junior technical schools and polytechnics will also be a part of secondary education."

**The All-India Secondary Teachers' Federation
(Seminar on Secondary Education 1962)**

"The Seminar was unanimously of the opinion that Eleven Class Higher Secondary School Scheme has failed. It, therefore, recommends the pattern of 5-3-4 meaning five years of primary education, followed by three years of juninor or lower secondary and four years of higher secondary stage. The four-year higher secondary stage is to be sub-divided into two stages of the 2 years each."

Vice-Chancellors' Conference (Oct. 1962)

"In regard to the total span of education opinion was unanimous in favour of a total span of 15 years for the first degree and 16 years or even 17 for a Technological Degree. The 15 years would be made up of 10 in high schools, 2 in higher secondary school or Junior college and 3 for the degree, whereas, in Bombay the total school period was 11 or where conversion of High School into Higher Secondary School has taken place, there should be 1 preparatory year before the Three-Year Degree Course. Opinion was divided in regard to whether the intermediate 2 year should be part of school or college."

Resolution passed at the Meeting of All-India Council for Secondary Education held in October 1963

(12-Year Course Recommended)

The Council after a detailed discussion on the pattern of secondary education on the basis of experiences in various States and Union Territories and the current thinking on the subject among the educationists, universities and public leaders recommended unanimously as under :—

- (i) The national pattern of secondary education should have an underlying uniformity throughout the country.
- (ii) The desirable national pattern is as under :—
 - (a) a total schooling of 12 years should be given to students admitted at the age of 6 in class I;
 - (b) the last 4 years should constitute the secondary stage of education.

- (c) an examination called higher secondary part I should be provided at the end of the first two years of the secondary stage in order to enable students to take up specialised and diversified courses at the secondary stage;
- (d) the examination at the end of the secondary stage should be called the higher secondary part II examination; and
- (e) the standard to be attained at the end of the secondary stage should approximate to the old intermediate standard and make the student eligible for admission to the 3-year degree course without the necessity of having to go through any other preparatory course like the PUC.

**Resolution passed at the Conference of the State Education Ministers
Vice-Chancellors and Eminent Educationists
held in November 1963**

(12-Year Course Recommended)

Secondary and Higher Education. Having surveyed the state of secondary education in the country, recognising the need for improving its quality by prescribing a higher standard, by using better text-books and providing for more qualified and better trained teachers, recognising further that there must be equivalence of standard while permitting room for flexibility and experiment in the pattern of education the conference expresses its agreement on the following points :—

(a) That a 12-year course of secondary education is the goal towards which the country must work, even though considerations of finance and manpower may not make it possible to implement such a scheme in all States in the immediate future;

(b) that the standard to be achieved at the end of secondary education in the country should for the present be raised so as to be equivalent at least to the intermediate examination of the former 4-year colleges;

(c) that the age of entry into the universities and comparable institutions should generally be 17+ and in no case less than 16+;

The State Education Ministers' Conference (1964). It recommended :—

1. Schools in all States should conform to a uniform school leaving standard.

2. The standard to be so achieved at the end of the secondary stage should be at least the intermediate level of the former 4-year colleges, with provision for appropriate diversified courses.

3. A 12-year course of schooling before admission to the degree course is the goal towards which the country must work, even though considerations of finance and manpower may not make it

possible to implement such a scheme for all States in the immediate future.

4. The entire education at the secondary stage should be done in the schools; classes such as the P.U.C. started in universities as a temporary measure, should be transferred to the schools as soon as possible in accordance with a phased programme.

Suggested Educational Structure by the Education Commission 1964—66 (Already given in this Chapter)

The Commission suggested the following :—

1. The new educational structure will consist of :
 - (a) One to three years of pre-school education.
 - (b) A primary stage of 7 to 8 years divided into a lower primary stage of 4 or 5 years and a higher primary stage of 3 or 2 years.
 - (c) A lower secondary stage of 3 or 2 years.
 - (d) A higher secondary stage of two years of general education or one to three years of vocational education.
 - (e) A higher education stage having a course of three years or more for the first degree and followed by a course for the second or research degree of varying durations.

General Observations

The Proposed Educational Structure is more Scientific. “The proposed system of one to three years of pre-school preparation, a 7-8 year primary stage, a lower secondary stage of 2-3 years, higher secondary of two years, and higher education beginning with a three-year course, will no doubt be considered more scientific than the present system, but unless the proposals are uniformly applied, the existing confusion and imbalance as between States cannot be removed.

(The Patriot, July 2, 1966)

Twelve-Year Course—A Very Practical Integrated System (*National Solidarity, July 7, 1966*), “The Commission has suggested a very practical integrated system consisting of a twelve-year course of Higher Secondary stage, followed by a three-year course for first degree and another two-year course for the final degree. This will be topped by special courses for higher studies for really deserving and capable scholars.”

Two-Year Higher Secondary Stage—An Important and Constructive Recommendation. Dr. D. S. Reddi, the Vice-Chancellor of the Osmania University observed, “The Commission has shown great wisdom in keeping the first degree stage at the present 3 years.”

(Deccan Chronicle, July 17, 1966)

“It has been categorical in attempting to strengthen and enlarge school education by spreading it over 12 years and in retaining English.”

(Hindustan Standard, Calcutta, July 12, 1966)

A Few Critics of the Proposed Pattern

"Dr. Anil Chandra Banerjee, veteran educationist and a former President of the Board of Secondary Education, wondered how by merely adding one more year to the present education structure, the quality of education could be improved. This would mean fresh financial burden on the shoulders of the overburdened guardians who would have to foot the bills for their wards in schools."

(Amrita Bazar Patrika, July 3, 1966)

Mr. G. N. Acharya states : "The period from the primary school to the first Arts or Science degree has been 15 years for a long time. Many variations of intermediate stages have been tried; but eleven years of schooling for matriculation or its equivalent has remained constant.

Now the Commission has proposed a ten-year, common, undiversified, lower secondary, and a two-year higher secondary course, followed by a three-year degree course. This merely combines the last year of the present secondary course and the existing Pre-University or First year.

This has the startling effect of *lowering* the standard of the general course equivalent to matriculation by one year, when the real need is for *raising* the standard. Secondly, as the upper secondary course examination is to be in the charge of another Board, this will result in a needless multiplication of such bodies."

(Blitz, July 9, 1966)

Dr. P. Parija (a veteran educationist of Orissa) felt, "The schooling period was recommended as 11 or 12 years with a primary stage of 4 or 6 years. Who will decide whether the period should be 11 or 12 years ? Such indecision is prejudicial to uniformity, he said.

Then, the Commission has suggested two types of Schools, one providing 12-year course and the other 11 or 12-year course. This is likely to create difficulty. If the students leaving the 10-year school intend, as they certainly will, to enter Colleges, will they be debarred or made to come through 11 to 12-year schools ?"

(Amrita Bazar Patrika, July 17, 1966)

Secondary Education Commission and Its Recommendations

Report of the Secondary Education Commission (1952-53)

Appointment of the Commission. The Central Advisory Board of Education at its 14th meeting held in January 1948 recommended the appointment of a Commission to examine the prevailing system of secondary education in the country and suggest measures for its reorganisation and improvement. The Board at its 18th Meeting held in 1951 reiterated its former decision and pressed for early implementation of its recommendation.

In view of these considerations, the Government of India set up the Secondary Education Commission by Resolution dated 23 September 1952. The Commission was inaugurated on 6 October, 1952. It submitted its Report in June 1953.

Chairman

1. Dr. A. Lakshmanaswami Mudaliar.
Vice-Chancellor, Madras University.

Members

2. Principal John Christie.
Jesus College, Oxford.
3. Dr. Kenneth Rest Williams,
Associate Director, Southern Regional Education Board,
Atlanta (U.S.A.).
4. Mrs. Hansa Mehta,
Vice-Chancellor, Baroda University.
5. Shri J. A. Taraporevala,
Director of Technical Education,
Government of Bombay.

6. Dr. K. L. Shrimali.
Principal, Vidya Bhavan Teachers' Training College,
Udaipur.
7. Shri M. T. Vyas,
Principal, New Era School,
Bombay.
8. Shri K. G. Saiyidain,
Joint Secretary to the Government of India,
Ministry of Education (*Ex-officio Member*).
9. Principal A. N. Basu,
Central Institute of Education,
Delhi (*Member-Secretary*).

Dr. S. M. S. Chari, Education Officer, Ministry of Education, acted as Assistant Secretary to the Commission.

Terms of Reference: (a) To enquire into and report on the present position of Secondary Education in India in all its aspects ; and

(b) Suggest measures for its reorganisation and improvement with particular reference to :

- (i) The aims, organisation and content of Secondary Education ;
- (ii) Its relationship to Primary, Basic and Higher Education ;
- (iii) The inter-relation of Secondary Schools of different types; and
- (iv) Other allied problems ;

so that a sound and reasonable uniform system of Secondary Education suited to our needs and resources may be provided for the whole country.

Reorientation of Aims and Objectives

As political, social and economic conditions change and new problems arise, it becomes necessary to re-examine carefully and re-state clearly the objectives which education at each definite stage, should keep in view.

Educational Needs of Democratic India

India has recently achieved its political freedom and has, after careful consideration, decided to transform itself into a secular democratic republic. This means that the educational system must make its contribution to the development of habits, attitudes and qualities of character, which will enable its citizens to bear worthily the responsibilities of democratic citizenship and to counteract all those fissiparous tendencies which hinder the emergence of a broad,

national and secular outlook. Secondly, though rich in potential resources, India is actually a poor country at present; a large majority of its people have to live at an economically sub-human level. One of its most urgent problems—if not the most urgent problem—is to improve productive efficiency, to increase the national wealth and thereby to raise appreciably the standard of living of the people. Thirdly, partly as a result of this oppressive and widespread poverty, there is a serious lack of educational facilities and the bulk of the people are so obsessed with the problem of making some sort of a living that they have not been able to give sufficient attention to cultural pursuits and activities. Hence there is need for re-orienting the educational system in such a way that it will stimulate a cultural renaissance.

From this necessarily sketchy analysis of the dominant needs of the present situation, it is clear that we shall have to formulate our aims with reference to these broad categories—the training of character to fit the students to participate creatively as citizens in the emerging democratic social order ; the improvement of their practical and vocational efficiency of their country ; and the development of their literary, artistic and cultural interests, which are necessary for self-expression and for the full development of the human personality, without which a living national culture cannot come into being.

Role of Education in Developing Democratic Citizenship

Citizenship in a democracy is a very exacting and challenging responsibility for which every citizen has to be carefully trained... The first requisite in this connection is to develop the capacity for clear thinking and a receptivity to new ideas... A democracy of people who can think only confusedly can neither make progress, nor even maintain itself, because it will always be open to the risk of being misled and exploited by demagogues who have within their reach today unprecedentedly powerful media of mass communication and propaganda... To be effective, a democratic citizen should have the understanding and the intellectual integrity to sift truth from falsehood, facts from propaganda and to reject the dangerous appeal of fanaticism and prejudice.

Closely allied to clarity of thought is clearness in speech and in writing. This is not only an important social asset, it is also an essential pre-requisite for successful living in a democracy which is based not on force but on free discussion, persuasion, and peaceful exchange of ideas. To be able to make one's influence felt and to assist in the formulation of healthy public opinion, an educated person should be able to express himself clearly both in speech and writing.

A democracy is based on faith in the dignity and worth of every single individual as a human being. This innate 'worthfulness' cannot be eclipsed either by economic or racial or social considera-

tion. The object of a democratic education is, therefore, the full, all round development of every individual's personality...It is obvious, however, that an individual cannot live and develop alone. Both for his own wholesome development and the good of society, it is essential that he should learn to live with others to appreciate the value of cooperation through practical experience and free interplay with other personalities. No education is worth the name which does not inculcate the qualities necessary for living graciously, harmoniously and efficiently with one's fellow men. Amongst the qualities which should be cultivated for this purpose are discipline, cooperation, social sensitiveness and tolerance.

A passion for social justice, based on a sensitiveness to the social evils and the exploitation which corrupts the grace of life, must be kindled in the heart and mind of our people and the foundations for it should be laid in the school...This social sensitiveness is the ethical basis of good character ; without it efficiency, discipline, cooperation and many other fine qualities may either remain unfructuous or may be corrupted for baser purposes. And finally, we must stress the importance of tolerance, without which it is impossible to preserve the health and even the existence of a democracy. The essence of a democratic society is not only the tolerating but the welcoming of differences which make for the enrichment of life...Another important aim which the secondary school must foster is the development of a sense of true patriotism. In the proper interpretation of this aim, the objective 'true' is as important as the noun ! The propriety of inculcating through education, a deep love of one's own country, is too obvious to require any justification, but in doing so it is necessary to take care that this love does not degenerate into nationalistic jingoism. True patriotism involves three things—a sincere appreciation of the social and cultural achievements of one's country, a readiness to recognise its weaknesses frankly and to work for their eradication and an earnest resolve to serve it to the best of one's ability, harmonising and subordinating individual interests to broader national interests. The school must address itself to building up this rich, three-fold concept of patriotism...There is no more dangerous maxim in the world of today than "My country, right or wrong". The whole world is now so intimately interconnected that no nation can or dare live alone and the development of a sense of world citizenship has become just as important as that of national citizenship. In a very real sense, therefore, "Patriotism is not enough" and it must be supplemented by a lively realisation of the fact that we are all members of One-World, and must be prepared, mentally and emotionally to discharge the responsibilities which such membership implies.

Improvement of Vocational Efficiency

So far as the second major element in our national situation is concerned, we must concentrate on increasing the productive or technical and vocational efficiency of our students. This is not merely a

matter of creating a new attitude to work—an attitude that implies an appreciation of the dignity of all work, however 'lowly' a realisation that self-fulfilment and national prosperity are only possible through work in which everyone must participate and a conviction that when our educated men take any piece of work in hand they will try to complete it as efficiently and artistically as their powers permit. The creation of this attitude must be the function of every teacher and it must find expression in every activity of the school. Students must acquire a yearning for perfection and learn to take pride in doing everything as thoroughly as they can; likewise teachers should learn to reject, firmly but with sympathy, all work that is half-hearted or slipshod, or casual...Side by side with the development of this attitude there is need to promote technical skill and efficiency at all stages of education so as to provide trained and efficient personnel to work out schemes of industrial and technological advancement.

Development of Personality

The third main function of Secondary Education is to release the sources of creative energy in the students so that they may be able to appreciate their cultural heritage, to cultivate rich interests which they can pursue in their leisure and so contribute, in later life, to the development of this heritage. In the past, our schools have left whole areas of the pupil's personality untouched and unquickened—their emotional life, their social impulses, their constructive talents, their artistic tastes.

Education for Leadership

A democracy cannot function successfully unless all the people—not merely a particular section—are trained for discharging their responsibilities and this involves training in discipline as well as leadership. The Primary or Basic School will inculcate in all the capacity for disciplined work while the University will train leadership at the highest level in different walks of life. The special function of the Secondary School, in this context, is to train persons who will be able to assume the responsibility of leadership—in the social, political, industrial or cultural fields—in their own small groups of community or locality.....But leadership in the wider sense of the word (which is not synonymous with political leadership) calls for a higher standard of education, a deeper and clearer understanding of social issues and greater technical efficiency. All these must be provided by our Secondary Schools in increasing measures. The secondary school must make itself responsible for equipping its students adequately with civic as well as vocational efficiency—and the qualities of character that go with it—so that they may be able to play their part worthily and competently in the improvement of national life. They should no longer emerge as helpless, shiftless individuals who do not know what to do with themselves and can only think of either crowding the colleges—which, for the majority, are a *cul-de-sac* or, as a last and reluctant resort, take up some clerical or teaching job for which they have no natural inclination.

Major Recommendations

1. New Organisational Pattern : (1) Under the new organisational structure, education should commence after a four or five years' period of primary or Junior Basic education and should include (a) the Middle or Senior Basic or Junior Secondary stage of 3 years, and (b) the higher secondary stage of 4 years.

(2) The present intermediate stage should be replaced by the Higher Secondary stage which should be of four years' duration—one year of the present Intermediate being included in it. As a consequence, the first degree course in the University should be of three years' duration.

(3) Multi-purpose schools should be established wherever possible to provide varied courses of interest of students with diverse aims, aptitudes and abilities.

(4) All States should provide special facilities for Agricultural education in rural schools

2. Technical Education. (1) Technical schools should be started in large numbers either separately or as part of multi-purpose school.

(2) Apprenticeship training being an important part of the training needed, suitable legislation should be passed making it obligatory for the industry to afford facilities to students for particular training.

3. Other Types of Schools. (1) Public schools should continue to exist for the present and the pattern of education given in them should be brought into reasonable conformity with the general pattern of national education.

(2) A number of residential schools should be established, more particularly in certain rural areas.

(3) A larger number of schools should be established to meet the needs of handicapped children.

4. Co-education : (1) While no distinction need be made between education imparted to boys and girls, special facilities for the study of home science should be made available in all girls' schools and co-education of mixed schools.

(2) Efforts should be made by State Governments to open separately schools for girls wherever there is demand for them.

5. Study of Languages. (1) The mother-tongue or the regional language should generally be the medium of instruction throughout the secondary school stage, subject to the provision that for linguistic minorities special facilities should be made available on the lines suggested by the Central Advisory Board of Education.

(2) During the Middle School stage, every child should be taught at least two languages. English and Hindi should be intro-

duced at the end of Junior Basic stage, subject to the principle that no two languages should be introduced in the same year. At the High and Higher Secondary stage, at least two languages should be studied, one of which being the mother-tongue or the regional language.

6. Curriculum. (1) At the middle-School stage, the curriculum should include (i) Languages, (ii) Social Studies, (iii) General Science, (iv) Mathematics, (v) Art and Music, (vi) Craft, and (vii) Physical Education.

(2) At the High School or Higher Secondary stage, diversified courses of instruction should be provided for the pupils. Diversified courses of study should include the following seven groups, (i) Humanities, (ii) Science, (iii) Technical subjects, (iv) Commercial subjects, (v) Agricultural subjects, (vi) Fine Arts, and (vii) Home Science, as and when necessary additional diversified courses may be added.

(3) A certain number of core subjects should be common to all students, whatever the diversified courses of study that they may take; these should consist of (i) Language, (ii) General Science, (iii) Social Studies, and (iv) Craft.

(5) The diversified curriculum should begin in the second year of the High School or Higher Secondary School stage.

7. Text-Books. (1) With a view to improving the quality of textbooks prescribed a high power Text-Books Committee should be constituted.

(2) The Text-books Committee should lay down clear criteria for the type of paper, illustration, printing and format of the books.

(3) Single text-books should not be prescribed for every subject of study, but a reasonable number of books which satisfy the standards laid down should be recommended leaving the choice to the schools concerned. In the case of languages, however, definite text-books should be prescribed for each class to ensure proper gradation.

(4) No book prescribed as a text-book or as a book for general study should contain any passage or statement which might offend the religious or social susceptibilities of any section of the community or might indoctrinate the minds of the young students with particular political or religious ideologies.

(5) Frequent changes in text-books and books prescribed for study should be discouraged.

8. Dynamic Methods of Teaching : (1) The methods of teaching in schools should aim not merely at the imparting of knowledge in an efficient manner, but also at inculcating desirable values and proper attitudes and habits of work in the students.

(2) The emphasis in teaching should shift from verbalism and memorisation to learning through purposeful, concrete and realistic

situation and, for this purpose, the principles of 'Activity Method' and 'Project Method', should be assimilated in school practice.

(3) In the teaching of all subjects special stress should be placed on clear thinking and clear expression both in speech and writing.

(4) A well thought-out attempt should be made to adopt methods of instruction to the needs of individual students as much as possible so that dull, average and bright students may all have a chance to progress at their own pace.

(5) Students should be given adequate opportunity to work in groups and to carry out group projects so as to develop in them the qualities necessary for group life and cooperative work.

(6) Every Secondary School should have a well-equipped school library; class libraries and subject libraries should also be utilised.

9. Discipline. (1) The education of character should be envisaged as the responsibility of all teachers and should be provided through every single aspect of school programme.

(2) In order to promote discipline, personal contact between teacher and the pupils should be strengthened; self-government in the form of house system with prefects or monitors and student-councils, whose responsibility will be to draw up a code of conduct and enforce its observance, should be introduced in all schools.

10. Religious and Moral Instruction. Religious instruction may be given in schools only on a voluntary basis and outside the regular school hours, such instruction being confined to the children of the particular faith concerned and given with the consent of the parents and the managements.

11. Extra-Curricular Activities. Extra-curricular activities should form an integral part of education imparted in the school and all teachers should devote a definite time to such activities.

12. Guidance and Counselling in Secondary Schools. Educational guidance should receive much greater attention on the part of the educational authorities. The services of trained guidance officers and career masters should be gradually made available to all schools.

13. Health Education. A properly organised school medical service should be built up in all States. A thorough medical examination of all pupils and necessary follow-up treatment where necessary should be carried out in all schools.

14. Physical Education. (1) All teachers below the age of 40 should actively participate in many of the physical activities of students and thus make them a lively part of the school programme.

(2) Full records of physical activities of the students must be maintained.

15. A New Approach to Examination and Evaluation. The number of examinations should be reduced and the element of subjectivity in the essay-type tests should be minimised by introducing objective tests. In the final assessment of the pupils due credit should be given to the internal tests and the school records of the pupils. The system of symbolic rather than numerical marking should be adopted. There should be only one public examination at the completion of the secondary school course.

16. Improvement of the Teaching Personnel. (1) The normal period of probation for a trained teacher should be one year.

(2) The teachers possessing the qualifications and performing the same type of work, should be treated on a par in the matter of grades of salary irrespective of the type of institution in which they are working.

(3) The system of triple benefit scheme, pension-cum-provident fund-cum-insurance, should be introduced in all States.

(4) Arbitration Boards or Committees should be established to look into the appeals and grievances of teachers.

(5) The age of retirement in the case of physically fit and competent teachers may be extended to 60 with the approval of the Director of Education.

(6) The children of teachers should be given free education throughout the school stage.

(7) Through a system of cooperative house building societies, teachers should be provided with quarters so as to enable them to live near the school.

(8) The practice of private tuitions by teachers should be abolished.

17. Teacher Training : (1) There should be only two types of institutions for teacher-training :

(i) For those who have taken the School Leaving Certificate or Higher Secondary School Leaving Certificate, for whom the period of training should be two years ; and

(ii) For graduates for whom the training may, for the present, be of one academic year, but extended as a long-term programme to two academic years.

(2) During the period of training all the student-teachers should be given suitable stipends by the State.

(3) All Training Colleges should provide adequate residential facilities.

18. Organisation and Administration : (1) There should be a Board of Secondary Education consisting of not more than 25 members with the Director of Education as its Chairman to deal with all matters of education at the secondary stage and to lay down general policies. A Sub-committee of the Board should deal with the conduct of examinations.

(2) State Advisory Boards should be constituted in each State to advise the Department of Education on all matters pertaining to education.

19. Inspection of Schools : (1) The true role of an Inspector should be to study the problems of each school and view them comprehensively in the context of educational objectives, to formulate suggestions for improvement and help the teachers to carry out his advice and recommendations.

(2) In addition to direct recruitment, Inspectors should also be drawn from (i) teachers of ten years' experience, (ii) headmasters of High Schools, and (iii) duly qualified staff of Training Colleges who may be allowed to work as such for a period of three to five years.

20. Managements of Schools : (1) The Managing Boards of all schools should be registered and should consist of a limited number of persons with the Headmaster as an *ex-officio* member.

(2) No member of the Managing Board should directly or indirectly interfere with the internal administration of the school.

21. School Building and Equipment : (1) The open spaces available in cities must be conserved to be utilised as playground by groups of schools.

(2) Normally, in designing buildings for schools, care should be taken to see that an area of not less than 10 sq. ft. is provided per student in the class-room.

(3) The optimum number of boys to be admitted to any class should be 30 and the maximum should not in any case exceed 40 ; the optimum number in the whole school should be 500 while the maximum should not exceed 750.

22. Hours of Working and Vacations : (1) As a rule the total number of working days in a school should not be less than two hundred, the working hours per week should be at least thirty-five periods about forty-five minutes each ; the school should work regularly for six days in the week, one of the days being a half day when the teachers and students might meet informally and work together on various extra-curricular and social projects.

(2) Normally during the year there should be a summer vacation of two months and two breaks of ten to fifteen days at suitable periods during the year.

23. Finance : (1) A cess called the Industrial Education Cess

be levied, the amount collected to be utilised for the furtherance of technical and vocational education at the secondary stage.

(2) The Centre should assume a certain amount of direct responsibility for the contemplated reorganisation of secondary education and give financial aid for the purpose.

General Observations on the Secondary Education Commission's Report

1. The Secondary Education Commission observed as regards financial and to Secondary Education, "It has been pointed out that the recommendations of the previous Commissions have not been given effect to largely because the necessary financial resources could not be made available either by the State or by the Centre." It is an irony of fate that the recommendations of this Commission have also met the same fate. The Secondary Education Commission did not give sufficient thought to the financial aspect of the various reforms.

2. The Secondary Education Commission did not suggest any short-term and long-term plans for the implementation of its recommendations.

3. Regarding agricultural education in Secondary Schools the commission observed, "The need, therefore, to educate the youth of the country to a proper appreciation of the role that agriculture plays in the national economy must be stressed in all schools. In view of its basic importance, we recommend that all States should provide much greater opportunities for agricultural education in rural schools, so that more students may take it and adopt it as a vocation." Thus it is evident that the Commission was fully aware of the importance of agricultural education but it did not suggest concrete measures for introducing it. The Commission thought it fit only to append a note on Agricultural Education in the U.S.A. by Dr. K. R. Williams. This note should have been thoroughly examined in the light of the situation existing in India.

4. The Commission's important recommendations on the new Organisational Pattern of Secondary Education are :

Under the new organisational structure, education should commence after four or five years' period of primary or Junior Basic Education and should include :—

(a) The Middle or Senior Basic or Junior Secondary stage of three years ; and

(b) The Higher Secondary stage of four years.

It may be seen from these recommendations that the Commission did not state in clear and unambiguous language what the total duration of the school course would be. This created a lot of confusion.

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5. The financial implications of the upgrading of a large number of high schools into higher secondary pattern in every State were not worked out.

6. The Commission suggested that the minimum qualifications required for teaching in the last two years of the higher secondary school were an M.A. degree or a first class B.A. degree with a degree in teaching. An adequate number of qualified post-graduate teachers were not available.

7. The introduction of core-subjects like crafts and general science in the curriculum of the higher Secondary school has created further difficulties regarding staff requirements.

8. The serious difficulties in the process of implementing the recommendations of establishing multipurpose schools could not be foreseen with the result that out of 22,581 higher secondary schools in 1963-64, there were only 2000 multipurpose schools. Thus we find that our schools remain as bookish and stereotyped as at the time of the recommendations of the Secondary Education Commission. One may aptly put this question : What has been the impact of the Secondary Education Commission ? The answer is quite obvious. We are where we were nineteen years ago.

9. The multipurpose schools have benefited neither the school-leavers nor the seekers of higher education.

10. A close scrutiny of the implementation of the recommendations of the Commission reveals that the quantitative expansion of secondary education has not been simultaneously accompanied by an expansion in the facilities that are necessary for the imparting of this education to a large number of the student population. Our zeal for implementing the recommendations has led to a dilution of standards at the institutional level.

11. The Commission did not give a clear-cut path of vocationalised education adequately. In no way our education has facilitated the task of finding suitable man-power for various sectors of development of industries and other services.

12. The Commission did not suggest methods of co-ordination between growth of economy, man-power needs, employment opportunities and the output of secondary schools.

Reasons for Unsatisfactory Implementation

The reasons for the unsatisfactory implementation in most of the States regarding the reorganisation of secondary schools may be stated as under :—

1. There is a variety of school patterns in the country. The primary or junior basic stage covers a period of four years in some States and five years in others. There is a variation in the high school stage from two to four years. The age of admission to Class I is 5 plus in some States and 6 plus in the others and this has increased

the confusion all the more. It is felt that the mere addition of one year to the school course is not helpful in evolving a common pattern of school education as envisaged by the Secondary Education Commission.

2. The pattern of the school course which existed in Delhi seems to have greatly influenced the reorganisation elsewhere. According to this pattern an elementary (or primary plus middle school) course should be of eight years and a higher secondary course of three years. In States, where school education is generally covered by a period of ten years followed by a University course of four years for the first degree, this reorganisation meant in effect either the transfer of one year from the college to the secondary school so that the high school became a higher secondary school, or the separation of one year from the university course to form a pre-university class. In other States where the total period of school and college education required for the first degree is generally 15 years (eleven years in school and four years in college) the reform implied the reduction of one year in the fifteen-year school and college course. This happened because these States were not prepared to extend the duration of school course from eleven years to twelve. Madras tried to compress its old eleven-year school course into a ten-year course for the purpose of bringing its school system into the reorganised pattern, but when it was about to reach its goal, it went back to its old pattern of eleven years of school education.

3. From the very beginning the old Bombay State (now Maharashtra and Gujarat) did not agree with the proposed pattern of reorganisation and made no attempt to change its system of secondary education. In Uttar Pradesh which has the system of intermediate colleges it is claimed that its intermediate classes are really higher secondary ; but as the intermediate course is followed by a two-year university course, Uttar Pradesh may also be regarded as a State which has not accepted the new pattern.

4. While undertaking the reforms the financial implications of the upgrading of a large number of schools in every State to the higher secondary pattern were not worked out. Even with Central aid the States that accepted the pattern could convert not more than a certain number of schools into higher secondary institutions.

5. The selection of high schools for conversion into higher secondary schools was to be governed by strict and carefully defined conditions. The Commission's Report stated that only those schools would develop into efficient higher secondary institutions which satisfied definite criteria prescribed regarding accommodation, equipment, qualifications of the staff, salaries and grades and adequate finances, and that such conditions have to be fulfilled scrupulously before the schools were recognised as higher secondary schools. The establishment of higher secondary schools in certain areas unfortunately became a matter of prestige for the people concerned. Social and

political pressures were sometimes used for getting the necessary recognition for their institutions. This resulted in the upgrading of a number of schools which did not satisfy the minimum criteria regarding accommodation, equipment, qualifications of staff, etc., and though the conversion has been effected it has not led to any marked improvement in the quality of education imparted in the institutions.

6. A successful reorganisation implied that teachers with higher qualifications should be made available for the teaching of the upgraded courses, at least in the additional year of the higher secondary stage. The Commission's Report suggested that the minimum qualifications required for teaching in the last two years of the higher secondary school were an M.A. degree or a first class B.A. degree with a degree in teaching. An adequate number of qualified post-graduates, however, were not available for the new courses. Moreover, the introduction of core subjects like crafts and general science in the curriculum of the higher secondary school created further difficulties regarding staff requirement. On account of the mediocre quality of the teaching personnel the standards of the higher secondary school have not been adequately raised and the reputation of the new organisational pattern has suffered as a consequence.

7. In view of the fact that it was not possible to convert all the high schools into higher secondary schools in the near future, the pre-university course was introduced as a transitional experiment. But the pre-University courses has come to be regarded as an institution which could continue for an indefinite time, particularly with the expansion in secondary education that has taken place during the last few years resulting in the establishment of a large number of new high schools all over the country. The one-year pre-University course has not served the purpose as it is a course of only seven to eight months. It takes several months to the students out of this short period for adjusting themselves to the new conditions, for adapting themselves to the methods of instruction different from what they have been accustomed to in schools, and (in the case of the majority of students) to a new medium of instruction, which is English. The pre-University year has thus become an ineffective period of study.

Indian Education Commission (1964-1966)

The publication of the report of the Commission, popularly known as Kothari Commission, in 1966, is an epoch-making event in the history of education in India.

The Commission was appointed by a Government Resolution in July 1964 to advise the Government of India on the national pattern of education and on the general principles and policies for development of education at all stages and in all aspects.

The Commission began its work on October 2, 1964 and submitted its report on 29 June, 1966.

Prof. D. S. Kothari, Chairman of University Grants Commission, New Delhi, was the Chairman of the Commission and Shri J. P. Naik, Head of the Department of Education Planning, Administration and Finance, Gokhle Institute of Politics and Economics, Poona, served as its Member Secretary. In all there were 17 members of the Commission. Twenty consultants from different countries of the world were available for advice to the Education Commission. Expenditure amounting to Rs. 14,97,169·18 was incurred on it.

The Commission set up 12 Task Forces and 7 Working Groups :—

Task Forces

1. Task Force on School Education.
2. Task Force on Higher Education.
3. Task Force on Technical Education.
4. Task Force on Agricultural Education.
5. Task Force on Adult Education.
6. Task Force on Science Education and Research.

7. Task Force on Teacher Training and Teachers' Status.
8. Task Force on Student Welfare.
9. Task Force on New Techniques and Methods.
10. Task Force on Manpower.
11. Task Force on Educational Administration.
12. Task Force on Educational Finance.

Working Groups

1. Working Group on Women's Education.
2. Working Group on the Education of Backward Classes.
3. Working Group on School Buildings.
4. Working Group on School Community Relations.
5. Working Group on Statistics.
6. Working Group on Pre-Primary Education.
7. Working Group on School Curriculum.

The Commission spent about hundred days in going round all the States and selected Union Territories. It visited universities, colleges and schools ; and held discussions with teachers, educationists, administrators and students. It convened two conferences of university student representatives to have the advantage of personal discussion with them about academic problems in general and about student welfare and discipline in particular.

The Commission interviewed distinguished men working in the different fields related to education. Among the persons interviewed were scientists, industrialists and reputed scholars and persons interested in education. Altogether 9,000 persons were interviewed. Besides, it invited written evidence, memoranda and replies to its questionnaire, organised seminars and conferences, commissioned a number of special studies and also conducted a few special enquiries, such as socio-economic background of students admitted to educational institutions, working days in schools and colleges. The total number of memoranda and notes sent to the Commission was over 2,400.

The Commission called on the President, Vice-President and the Prime Minister and had the benefit of discussion with them. It had discussion with the Minister for Education and some of his other Cabinet colleagues, and with the Deputy Chairman of the Planning Commission and Member-in-Charge of Education and some of the other members of the Commission. The Chief Minister and Education Minister and their colleagues, offered willing cooperation. Several discussions were held with Education and Finance Secretaries to the State Government in the Education and Finance departments. Among the non-officials, the Commission had discussion with the

President of the Indian National Congress, Members of Parliament and State Legislature, Vice-Chancellors, Educationists, Industrialists and Journalists.

Three Parts of the Report. The report entitled 'Education and National Development' is divided into three parts.

The first part Covers Chapters I to VI. It states the goal of education and general aspects of educational reconstruction common to all States and sectors of Education, such as the reorientation of the educational system to national objectives, structural reorganisation, improvement of teachers, enrolment policies and equalisation of educational opportunities.

The second part covers Chapters VII to XVII and deals with the different stages and sectors of education and is further divided into four sections. Section I comprises Chapters VII to X on some aspects of school education such as problems of expansion, curriculum, teaching methods, guidance and evaluation, administration and supervision. Section II includes Chapters XI to XIII and deals with some aspects of higher education such as the establishment of major universities, programmes of qualitative improvement, enrolments and university governance. Section III consists of Chapters XIV to XVI and deals with science education, scientific research and the preparation of trained personnel needed for modernisation of agriculture and development of industry. Section IV comprises Chapter XVII, wherein problems of adult education including the liquidation of illiteracy the development of library services and university extension have been dealt with.

The third part concerns problems of implementation. It has two chapters—Chapter XVIII which deals with Educational Planning and Administration and Chapter XIX dealing with Educational Finance.

A Unique Commission and the First Commission to Survey the Entire Field of Education

This is the sixth Commission in the history of education commissions in India. The *Indian Education Commission* (1882-83), the first, in the series, was set up under the chairmanship of William Hunter to enquire into the manner in which effect had been given to the principles of the Despatch of 1854 with particular emphasis on elementary education. The second and the third commissions, viz., the *Indian Universities Commission* (1902) under the chairmanship of Mr. Raleigh, a member of the Viceroy's Executive Council and the *Calcutta Universities Commission* (1917) under the chairmanship of Sir M.E. Sadler, Vice-Chancellor of Leeds University, dealt with the problems and prospect of university education. The next three commissions were appointed in the post-independence era. The *University Education Commission* (1948-49) set up under the chairmanship of Dr. Sarvepalli Radhakrishnan and the *Secondary Educa-*

tion Commission (1952-53) appointed under the chairmanship of Dr. Lakshmanswami Mudaliar were the fourth and the fifth respectively, in the series of commissions on education. Mention may also be made of the *Sanskrit Commission* (1956-57) appointed to consider the present state of Sanskrit education.

All the five earlier commissions did not deal with education as a whole but focused attention on different levels of education—the first dealt with some aspects of primary, secondary and college education (excluding university education), the second, third and fourth with university education, and the fifth with secondary education. The unique feature of *Education Commission* (1964-66) was to limit its enquiry to specific sectors or aspects of education, but to have a comprehensive review of the entire educational system. The Government of India realised that : “It is desirable to survey the entire field of educational development as the various parts of the educational system strongly interact with and influence one another. It is not possible to have progressive and strong universities without efficient secondary schools and the quality of these schools is determined by the functioning of elementary schools. What is needed, therefore, is a synoptic survey and an imaginative look at education considered as a whole and, not fragmented into parts and stages.”

Another unique feature of the Commission was its conviction that education is the most powerful instrument of the national development. Educational and national reconstruction are intimately interlinked. The crucial role of education in national development appears in all its vividness on every page of the report. Standing at the critical cross-roads of history, India has to make a choice. The choice lies between education and disaster. The report concludes : “We must either build a sound, balanced, effective and imaginative educational system to meet our developing need and respond to our challenging aspirations or be content to be swept aside by the strong currents of history.” Never before education was given such a niche of national honour, and, never before was it conceived as a pivot of nation’s progress and the prosperity as revealed in the pages of the Commission’s report.

The international composition of the Commission is also significant. Education for India must necessarily emerge from Indian experience, thought, culture and local conditions. But as education remains the common quest of mankind inhabiting a world closely knit together, it was found profitable to draw upon the experiences and thinking of educationists and scientists from other countries and to take advantage of the latest developments in the educationally advanced countries. The Commission thus included eleven Indian members and five others; one each from Japan, France, U.K., U.S.A., and U.S.S.R. Besides, 20 consultants from different countries of the world were available. It is of historical interest to note that the first commission namely the *Indian Education Commission* (1882-83) had 7 Indians and 14 Englishmen, but in 1902 Curzon omitted to put any

Indians on the *Indian Universities Commission* (1902) though a Hindu and a Muslim were added later when the harm had already been done. The *Calcutta University Commission* (1917) had some Indian members including Sir Asutosh Mukherji. The *University Education Commission* (1948-49) and the *Secondary Education Commission* (1952-53) had educationists both from U.K. and U.S.A.

Three Facets of Educational Resolution

The Commission identified three important facets of the big programme that would bring about the desired 'educational revolution' :

- Internal transformation so as to relate it to the life, needs and aspirations of the nation ;
- Qualitative improvement so that the standards achieved are adequate, keep continually rising and, at least in a few sectors, become internationally comparable; and
- Expansion of educational facilities broadly on the basis of manpower needs and with an accent on equalization of educational opportunities.

Four-Fold Educational Programme

For the internal transformation of the system of education the following programmes urged high priority :

- (1) Work experience as an integral part of general education ; vocationalisation of education at the secondary level ; improvement of professional education and research, promoting national consciousness ;
- (2) Introducing a common school system, making social and national service compulsory; developing all modern Indian languages;
- (3) Making science education an integral part of all school education and developing scientific research ;
- (4) Inculcation of high values—social, moral and spiritual at all stages of education.

Four-Fold Objectives of Education

The transformation was considered necessary for achieving the four national objectives : increasing productivity, achieving national integration, accelerating the process of modernisation and cultivating social, moral and spiritual values.

Programmes for Improving the Quality of Education

The quality in education is crucial for national development and the nation must be prepared to pay for the quality. According to the Commission's recommendations, the major programmes for qualitative improvement include raising the economic, social and

professional status of teachers and improving the quality and scope of teacher education and in-service programmes ; radical reform especially in science and mathematics, vigorous improvement in the method of teaching and evaluation, and providing quality text-books and other teaching material; search for introduction of a nationwide programme of school and college improvement where each institute finds congenial conditions to strive continually to achieve the best results of which it is capable, the establishment of 'quality' schools to act as pace-setters in their districts and the creation of 5 or 6 'major' universities : revitalising the system of supervision and reorganising the State departments and the reorganisation of the educational structure on the 10+2+3 pattern.

Expansion Programme

The Commission hopes that 5 per cent of the 3-5 and 50 per cent of the 5-6 age-groups will find places in nursery schools or classes by 1986. It recommends five years of good education for all children by 1975-76 and seven years of such education by 1985-86, and places the highest priority for free and compulsory education up to the age of 14. The problems and policies of expansion at the Secondary stage would differ from those in primary education because on the one hand it would not be financially possible for several years to come to have universal secondary education and on the other hand it would be essential to enlist half the enrolment at the higher secondary stage in vocational education. It is an important recommendation that the expansion of higher secondary and collegiate education should be related to manpower needs and must be selective. The programmes of equalisation of educational opportunities visualised by the Commission include the reduction of the regional imbalances to the minimum, increased provision of free education and scholarships, paying special attention to the education of girls, placing adequate emphasis on the spread of education among backward classes including the Scheduled Castes and the Scheduled Tribes. It is also recommended that a nationwide campaign should be launched for complete liquidation of illiteracy within 20 years.

48 Major Recommendations of the Kothari Commission

1. Education and National Objectives. The most important and urgent reform needed in education is to transform it, to endeavour to relate it to the life, needs and aspirations of the people and thereby make it a powerful instrument of social, economic and cultural transformation necessary for the realisation of the national goals. For this purpose, education should be developed so as to increase productivity, achieve social and national integration, accelerate the process of modernisation and cultivate social, moral and spiritual values. 1.20(6) (Chapter 1, Para 20, P. 6)

2. Stress on Social Education. Education must become an integral part of School education and ultimately some study of science should become a part of all courses in the humanities and social sciences at the University stage (1.23, P. 5, 6)

We pay great emphasis on making science an important element in the school curriculum. We, therefore, recommend that science and mathematics should be taught on a compulsory basis to all pupils as a part of general education during the first ten years of schooling. (8.50, Pp. 197-198)

Every primary school should have a science corner or a room to keep specimens, models and charts with the necessary storage facilities. A minimum of one laboratory-cum-lecture room should be provided in every higher primary school. (8.56, P. 198)

3. Work Experience. Work experience should be introduced as an integral part of all education—general or vocational. (1.25, P. 77)

4. Vocationalisation. An other programme which can bring education into closer relationship with productivity is to give a strong vocational bias to secondary education and to increase the emphasis on agricultural and techonological education at the university stage. (1.32, P. 8)

5. Common School System. A common school system of public education should be introduced. (1.35, P. 9)

6. Social and National Service. Social and national service should be made an integral part of education at all stages. (1.35, P. 9)

7. Ten Years of Schooling of General Education. The first ten years of schooling should cover a primary stage of seven or eight years and a lower secondary stage of three or two years providing a course of general education without any specialisation. (2.17, P. 30)

8. Specialisation in Classes XI and XII. Classes XI and XII (and during the transitional period class XI only) should provide for specialised studies in different subjects at the higher secondary stage. [2.18(3), P. 30]

9. Two Years Duration of Higher Secondary Stage. The Higher Secondary stage should be extended to cover a period of two years and to be located exclusively in schools. (2.29, P. 35)

Steps be taken to implement this reform through a phased programme spread over the next 20 years. 1965-85 (2.29, P. 35)

10. Instructional Days in Schools. The number of instructional days in a year should be increased to about 234 (or 39 weeks) for schools and 216 (or 36 weeks) for colleges and pre-primary schools. (2.35, P. 538)

11. Holidays to be Minimised. There is no need to close an educational institution on a religious holiday. Nor is it necessary for instance to close it on birthdays or death anniversaries of great Indians; the time could be better utilised in working hard for national development. (2.37, P. 39)

12. Academic Year to begin on the Same Day. It is desirable

In an academic year, the hours of instruction at the secondary stages should not be less than 1000, and preferably raised to 1,100 or even 1,200 if conditions are favourable. (2.40, P. 40)

13. Maximum Utilisation of School Facilities. The libraries, laboratories, workshops, craftsheds etc., should be open all the year round and should be utilised for at least eight hours a day. (2.42, p. 40)

14. College to be Related to a Number of Schools. Each college can be functionally related to a number of secondary Schools in the neighbourhood and enabled to provide extension services and guidance to them to improve their standards. (2.49, P. 431)

15. Free Text-Books at the Primary Stage. At the primary stage a programme of providing free text-books should be given very high priority and introduced immediately. [6.16(1), P. 113]

16. Book Banks in Schools. A programme of book banks should be introduced in secondary schools and in institutions of higher education. [6.16(2), P. 113]

17. Adequate No. of Scholarships. The top 10 per cent of the students in educational institutions should be given small grants annually for the purchase of books which need not necessarily be text-books. [6.16(3) P. 114]

Steps should be taken to ensure that at the end of the lower primary stage no promising child is prevented from continuing his studies further on account of non-availability of a school or of socio-economic difficulties and to this end scholarship of an adequate amount will have to be provided to every child that may need it. (6.19, P. 114)

The main object of the scholarship programmes to be developed at the secondary stage would be to ensure that under any circumstances the top 15 per cent of the children in the age-group do get transferred to secondary schools and that their further education is not prevented by poverty. (6. 20, P. 115)

18. Identification of Gifted Students. Steps should be taken immediately to devise suitable techniques for identifying talent at this stage. Each state should organise a testing service at the end of the primary stage (class VII or class VIII) and also at the end of the lower secondary stage (class X) and make the assistance available to all the schools. (6.22, P. 115)

19. Residential Facilities in Schools. One good secondary school (with adequate residential facilities should be developed in each community development block and about 10 per cent of urban schools should also be similarly covered. [6.20(2), P. 115]

20. Provision of Day Study Centres. For students who do not have adequate facilities for study at home, it is necessary to provide a

large number of day-study centres at the secondary and university stage. Some institutions have tried to provide this facility by adopting an unorthodox approach *i.e.* by using class-rooms for residential and study purposes before and after school hours at night. Experiments of this type should be encouraged. [6.39 (2), P. 121]

21. Learning while Earning. Facilities for students to earn and pay a part of the expenses should be developed on as large a scale as possible as a supplement to the programme of scholarships. [6.39(3), P. 121]

22. Education of the Handicapped. It should be possible to have at least one good institution for the education of handicapped children in each district. (6.46, P. 124)

The NCERT should have a cell for the study of the handicapped. [6.49(3), 125]

23. Education of the Backward Classes. The education of the backward classes in general and of the tribal people in particular is a major programme of equalisation and of social and national integration. No expenditure is too great for the purpose. (6.75, P.143.)

24. State-Level Centres for Pre-Primary Education. There should be a state-level centre for the development of pre-primary education located in the State Institutes of Education. [7.07(1), P. 149].

25. Developmental Plan for Each District. A development plan for secondary education should be prepared separately for each district after taking into consideration the existing and perspective needs of expansion. [7.46(1), P. 170]

26. Enrolment between 360 and 450 in a Secondary School. In order to be well equipped and efficient a secondary school should have at least three divisions in each of the three classes of the secondary stage *i.e.* a total of nine divisions and an enrolment between 360 and 450. (7.60, P. 180)

27. Freedom to Schools for Experimental Curricula. Schools may be permitted to try out experimental curricula. (8.06, P. 185)

28. Two Sets of Curricula. The State Boards of school education should prepare two sets of curricula advanced and ordinary. (8.07, P. 185)

School need not adopt the advanced curricula in all the subjects. [8.08(1), P. 185]

One being the common curricula for the pupils who are average in ability and the other being an advanced curricula for the very bright pupils. (8.29, P. 191)

29. Three or Four Text-Books for Each Subject. No useful purpose is served by having only one text-book in a subject for a given class—this is almost invariably the position under the existing

programme of nationalisation. It should be an important objective of policy to have at least three or four books in each subject for each class and leave it open to the teacher to choose the book best suited to the school. This is necessary even if there were to be common syllabus for all the schools. [9.20(3), P. 231]

30. Moral and Religious Education. Conscious and organised attempts be made for imparting education in social, moral and spiritual values with the help wherever possible of the ethical teaching of great religions. (8.94, P. 200)

31. Co-curricular Activities. Every school should organise a variety of such programmes that every child in it may be able to take up something suited to his tastes and interests. (8.101, P. 207)

32. Guidance and Counselling. Guidance and counselling should be regarded as an integral part of education, meant for all students and aimed at assisting the individual to make decisions and adjustments from time to time.

33. Evaluation. Evaluation is a continuous process, forms an integral part of the total system of education and is intimately related to educational objectives. It exercises a great influence on the pupil's study habits and the teacher's methods of instruction and thus helps not only to measure educational achievement but also to improve it.

The new approach to evaluation will attempt to improve the written examination so that it becomes a valid and reliable measure of educational achievement and to devise techniques for measuring those important aspects of the student's growth that cannot be measured through written examinations. [9.65-68 (243-244)]

34. Establishment of School Complexes. The School complex should be established. Each higher primary school should be integrally related to ten lower primary schools that exist in its neighbourhood so that they form one complex of educational facilities. The headmaster of the higher primary school should provide an extension service to the lower primary schools in his charge and it will be his responsibility to see that they function properly. The second tier would be a committee under the chairmanship of the headmaster of the secondary school (all headmasters of the higher and lower primary schools in the area being members) which will plan the work and give guidance to all the schools in the area. (2.51, P. 43)

35. The Neighbourhood School. The present social segregation in schools should be eliminated by the adoption of the neighbourhood school concept at the lower primary stage under which all children in the neighbourhood will be required to attend the school in the locality. This plan should be implemented in a period of 20 years.

36. State Evaluation Organisation. To assist the State Education Department in this programme of prescribing, maintaining and revising standards, a State Evaluation Organisation should be set up in each State, as an independent institution, preferably autonomous, and its services should be available to all concerned. (10.59, P. 268)

37. State and National Boards of Education. In order to secure continuous improvement in standards, and adequate machinery should be set up at the State and national levels. (10.54, P. 267)

38. Correspondence Courses. An immediate beginning should be made to develop a wide range of vocational and technical courses through correspondence. However, before this medium could be adopted extensively, very careful preparation and testing would be required. [15.74-75(384)]

39. Minimum Scales of Pay for Teachers. At the school stage, the government of India, should lay down the minimum scales of pay for school teachers. The States and Union Territories should then adopt equivalent or higher scales of pay to suit their local conditions. (3.08, P. 48)

40. Same Pay in Different Managements. The scales of pay of school teachers belonging to the same category but working under different managements such as government, local bodies or private organisations should be the same. (3.09, P. 49)

The minimum salaries of primary, secondary and university teachers should be in the ratio of 1 : 2 : 3. [3.10(4), P. 50]

41. Liberal Assistance to States. Liberal Central assistance should be given to State Governments for improving the salaries of school teachers as recommended by us. (3.28, P. 59)

42. Retirement Age. Normal retirement age for teachers be 60 years and there should be a provision for extension up to 65 years provided the person is physically fit and mentally alert to discharge his duties efficiently. [3.30(1), P. 60]

43. The Indian Education Service. The creation of the Indian Education Service is a step in the right direction and if organised on proper lines, such a service would help the progress of Education. (18.44, P. 458)

44. Education Acts. Education should be given a statutory basis everywhere and in all sectors and that an Education Act should be passed in all the States and union Territories. (18.57, P. 463)

45. Duration of Degree Courses. The duration of the first degree course should not be less than three years. (2.29, P. 35)

Apart from this there should be no rigidity about the duration of courses in higher education. (2.29, P. 35)

These may vary from university to university and even in the same university from subject to subject. (2.29, P. 35)

A more liberal provision of scholarships should be made for these longer courses for the first and second degrees. (2.29, P. 36)

47. Experimental Schools and Universities. The universities can conduct experimental secondary or primary schools to evolve improved techniques of teaching and organisation. (2.49, P. 43)

48. Talented Students and the Role of the Colleges. The universities and colleges could select talented students for the schools in different subjects at an appropriate stage, say, in the age-group 13-15 and help them to develop their knowledge through individual guidance, provision of laboratory facilities etc., over and above regular school work. (2.49, P. 43)

Favourable Comments on the Report

1. A Unique Report—Mr. M. C. Chagla, the then Union Education Minister.
2. Bold and pertinent—The Indian Express, July 1, 1966.
3. A Comprehensive, Critical and Constructive Review of the Education System prevailing in the country—The Hindustan Times, July 1, 1966.
4. A Good Document—Mr. Chanchal Sarkar in the Hindustan Times, July 14, 1966.
5. Bold, Categorical and Realistic—The Hindustan Standard, Calcutta, July 12, 1966.
6. A Historical Document—The Educational India, Masulipatam, July, 1966 (Monthly).
7. Revolutionary Recommendations—Awaz-i-Ustand, Chandigarh (Weekly), July 7, 1966.
8. Revolution in Education—National Solidarity (Weekly), July 7, 1966.
9. Educationists and Teachers Welcome the Recommendations—Hindu, July 1, 1966.
10. Science Teachers Welcome Commission's Report—Indian Nation, 11th July, 1966.
11. Teachers Welcome Education Commission's Report—The Patriot, July 13, 1966.
12. Original and Significant Contribution—Dr. D. S. Reddi, Deccan Chronicle, July 17, 1966.

Critics of the Report

1. Death Certificate of Basic Education—Shri M. N. Acharya in Blitz, 9th July, 1966.
2. Intellectual discipline ignored—sensible in parts but often platitudinous—The Statesman, July 3, 1966.
3. Confusing—Amrita Bazar Patrika, July 13, 1966.

General Observations on the Recommendations

Aims and Objectives. The report begins with a statement of objectives. It redefines education, restates its aims and objectives and it focuses our attention on the social and national aspects of its function. We are in general agreement with the objectives. Education must adjust itself to the changing needs and it must strike a balance between the spiritual, cultural and scientific values of the emerging social order. Two other important objectives which have been stressed by the Commission are (a) Vocationalisation of Education and (b) Work Experience in all educational activities. These ideas would require a good deal of thinking before being put into practice. The Commission's recommendations with regard to 'emotional integration' and 'International Understanding' are welcome.

Educational Structure. For very cogent reasons we are in favour of a 12-year pattern. The reasons for the change are stated by the Commission. Our character-building activities at the schools, such as N.C.C., scouting, sports do not find sufficient scope for creating an impact on the child within three years i.e., IX, X, XI. A longer duration will help us in providing training to school children in Community Service Projects without decreasing the content of the syllabus. It is also felt that the 12th year of the present Higher Secondary would provide for the country better equipped man-power for various walks of life.

Utilisation of Vacation. The Commission recommends that the manpower in teaching should be utilised for various projects during the summer vacation on an honorarium basis. The teaching community is generally resistant to working in vacations. Besides, in most of the States summer vacation falls during the extremely hot days of May and June during which it is not easy to carry out major projects. Teacher manpower could be used for adult literacy and some other community welfare activities. The myth of taking voluntary work from teaching community has long been exploded. Payment of generous honorarium to them is absolutely essential as suggested by the Education Commission.

Abolition of Fees at the Higher Secondary Stage. The Commission has recommended the abolition of fees in the interest of poor students in the schools who are coming up in increasing number for the Higher Secondary Education. Free education might be given only to such class of students as are not able to pay their fees.

Curriculum. In the matter of curriculum there is a greater emphasis on the teaching of Science. The Commission recommends that there should be no optional up to class X and bifurcation would be effected only from class XI.

Right Emphasis on the Teaching of Science and Promotion of Scientific Research. The emphasis has been rightly laid on the development of science which leads to advances in technology.

The enrolment of students needs to be increased at all levels. Without qualified teachers for teaching science subjects, an increase in enrolment is not possible.

Provision of Well-Equipped Laboratories. This is most essential if teaching of science subjects is to be effective and efficient.

The provision of laboratories of proper size will facilitate teaching work and lead to the development of research attitude so necessary for advancement in the subject.

Provision of Vocational Courses in Schools. This provision is most essential and has to be related to manpower needs in the country. An area survey is needed to find out the job requirements in the next two to three years and possibilities for employment in the next ten years. These courses should include a large number of fields—agriculture, industry, trade and commerce and secretariat courses, etc. The idea is that these courses should lead to employment.

Schools situated in rural areas should give an agricultural orientation to their programmes and formal education for agriculture should begin after class X in agricultural polytechnics.

Education for Industry. Provision for skilled, semi-skilled workers have to be made for technological advancement. For this, expansion of Industrial Training is needed and proper certificates have to be awarded to ensure that all certificates are recognised and trained personnel are fixed up. Job analysis should be attempted.

Work Experience. The recommendation of providing work experience as an integral part of all education is welcome as it will provide experiences which are likely to be very useful to our students.

The concept of work experience can only be realised if due preparation is made by training teachers and by supplying requisite material. The main difficulty is that we have a very heavily loaded time-table in our schools. It may not, therefore, be easy to have work experience of Secondary Education. We shall have to depend on Central Workshops to be shared by a group of schools. We can (i) utilise vacations for the work experience and pay the staff extra, (ii) duration of school session can be increased by two weeks and thus work experience can be made an integral part of the programme, (iii) shift system can be used with advantage. While one set of students are using the classes the other set can use the work rooms or fields and *vice versa*.

Social and National Service. The linking of community with schools is desirable and as such the Commission would like social and national service to be made an integral part of education.

When the demand on school time-table is heavy it may not be possible to include such a programme in the normal school programmes but the vacation can be utilised for such a programme. It is felt that it may not be possible to have such a programme for all students of secondary schools.

The Common School. The Commission has recommended the setting up of the Common School or the neighbourhood school which will be open to all alike living in one neighbourhood. It implies the provision of same facilities for all.

The common school will pull down the disparities of social stratification. An adequate provision of basic facilities is a must if the idea of common schools is to take root in our country.

The Commission has recommended the restriction of Merit Scholarship to common schools only.

This may be helpful as public funds which are spent on a select few can be utilised for more. Students can be provided scholarships for study in their own schools instead of being uprooted from their schools and homes and transplanted in boarding schools.

Special facilities for intensive study can be provided for the talented by allowing them books for study and special facilities for supervised study in their schools.

Equalisation of Opportunities. (a) The target is to provide free education for all up to Higher Secondary stage and provision of free text-books, etc. and provision of scholarships to increasing percentage to be made.

A provision of free text-books will be helpful. The supply of free text-books does not imply the permanent possession of the text-books as in some Western countries books can be used for a year and then returned to school for use by others. This will naturally reduce the finances involved in providing books.

(b) To equalise opportunities scholarships should be increasingly provided to cover the cost of books and other expenses, etc.

(c) The provision of free education up to Higher Secondary stage as recommended may not be possible.

(i) The first step may be that we extend the freeships to all those who cannot afford to pay fees.

(ii) Merit scholarships can be made available to 5% to begin with and this can be increased to 20% in the course of ten years.

(iii) Free books can be made available to very deserving students.

- (ii) Book banks can be opened from where books can be deposited and drawn by those who need them.

Teachers' Status

1. Unless we pay our teachers well, we cannot retain them in service especially teachers of shortage category.

2. To improve the standard of primary education the recommendation of the Commission for the appointment of graduate trained teachers as Heads of primary schools seems to be a step in the right direction.

3. The selection grade recommended for primary school teachers, and graduate teachers is welcome.

4. The opportunities for promotion for teachers of primary and secondary stages are necessary.

5. The benefits recommended are likely to satisfy teachers. The raising of age of retirement to 65 is not a wise recommendation as teachers after 60 years of age cannot be as active as in earlier years.

Professional Preparation

1. The professional preparation of a teacher has to be thorough. Unless our teachers are trained properly they cannot discharge their responsibilities satisfactorily.

To improve the preparation of teachers we need to have a comprehensive teachers' training college where teachers of all categories are trained.

2. The in-service training programmes for teachers are likely to keep them oriented.

Student Welfare—Free Supply of Text-Books for all. Our financial resources cannot permit us to do the needful immediately.

Books can be supplied for use in primary classes for all and in secondary schools for those who cannot afford to have them.

Guidance Service for All. The service available to some schools can be made available to more schools. The scheme of a common counsellor for a group of schools may be tried.

Earn and Learn Facilities for Schools. These are needed by a number of students who do not have the means. Evening classes can go a long way for those who need to earn.

Assistance to Gifted and the Backward Children. Within the framework of a national system of education the Commission has recommended special provision for the gifted and the backward children which have been neglected so far. The provision of courses at two levels is likely to be helpful to the gifted and the backward children.

The provision of two levels may be resisted by parents who may not like their children to be labelled as inferior. But, if provision of two levels of teaching is made in the same school and the door is kept open for the children to move up to higher courses the resistance may be less.

Language Policy. The Commission agrees that the development of modern language is urgent and necessary for reasons educational, cultural and political. In the interest of science and technology also language requires special attention. The boy can assimilate knowledge quicker in the mother tongue. Language is also a means to destroying class-consciousness. The Commission mentions two safeguards against a much too quick adoption of Hindi as medium of instruction in All-India Institutions. Hindi should be made richer and the non-Hindi students should not be allowed to be adversely affected. Mother tongue should become the medium of instruction at school and college level.

Moral Education. The Commission has made the recommendation that some periods per week should be set apart in the time-table for moral education. All education in a way is a moral process but special efforts in the present social climate showing a decline in our values are necessary. It would be ideal to have two periods per month, two should be devoted to some kind of project which would instil in children a love for the service of others and specially of the disabled and the needy.

Concluding Remarks. Education Commission's report is an achievement, a mine of information and wisdom. The report is a synoptic survey of the entire educational situation in all its complexities. It reveals an imagination sweep not found in the excellent report of the past. The achievement was possible partly because the Commission had faith in the key-role of education in national development implying economic growth and social transformation and partly because it was knowledgeable in the strategy and techniques of perspective planning. The Education Commission naturally hopes that the nation would be willing to pay for the reforms leading to the transformation of education so that fullest possible development of human resources might be possible. The Commission boldly assigns to education the task of transforming and modernising existing social order so that the desired goal of a socialistic pattern of society might be realised within the foreseeable future. While it may not be possible to engineer the educational revolution envisaged by the Commission with our present resources we shall have achieved a marked advance even if half the recommendations are implemented.

A survey of such a large magnitude is bound to have omission here and there. The Education Commission, for instance, is not clear and definite enough on the content and courses for elementary stage. A redefinition of basic education and an examination of the merits of the earlier-eight year composite basic school would have been worthwhile. The division of the primary stage into lower and higher, the

nature of work experience, the qualitative aspect of the elementary stage are issues which need explaining. It is doubtful if a teacher can efficiently work with a class of 50 children and still more doubtful if there are rooms in most of the schools which can seat 50 children.

The concept of work-experience and vocationalisation of education have been left nebulous. Higher education receives a disproportionate emphasis. Probably, there is anxiety to produce executives, managers, technicians of calibre for the emerging industrial society.

The creation of pace-setting schools and six major universities is a disturbing recommendation. It is bound to create a new caste and deprive the common schools of the few good teachers working in them. The recommendation does not seem to be in harmony with those relating to 'school complexes' and 'neighbourhood school'.

The bulk of the report could have been reduced by taking over the discussions on pedagogical issues from the body and putting them in the form of appendices.

The language at places becomes difficult because of the frequent use of phrases and expressions not yet widely current.

The Curriculum

Widespread Dissatisfaction with the Curriculum. The Education Commission 1964-66 stated, "The school curriculum is in a state of flux all over the world today. In developing countries, it is generally criticised as being inadequate and outmoded, and not properly designed to meet the needs of modern times. Even in an educationally advanced nation like the U.S.A., where the traditional curriculum had been radically transformed long ago under the impact of progressive education, the content of the school courses is being challenged by several scholars and university men, and a new reform movement has been started which may bring sweeping curricular change in school education". This widespread dissatisfaction with the curriculum is due to many causes.

Three Causes of this Widespread Dissatisfaction

1. Explosion of Knowledge. In the first place, the tremendous explosion of knowledge in recent years and the reformulation of the basic concepts in the physical, biological and social sciences has brought into sharp relief the inadequacies of existing school programmes. The gulf between the schools and the university in major academic disciplines, which was always wide has become wider still with the rapid advance of science.

2. Rethinking on General Education. Secondly, there has been a rethinking in educational circles about the nature and duration of the education that is imparted in ordinary secondary school. Expert opinion now generally favours the period of general education and the postponement of specialised study to a later period in the secondary school course.

3. Dynamic and Stimulating Methods. Again, with the necessity of including more and more significant items in an already over-packed school curriculum it is realised that there is a good deal of useless educational lumber in the school courses which can be safely discarded, and that more dynamic and stimulating method can be developed for

presenting essential knowledge. All these factors are responsible for the increasing pressure for the reform of the schools curriculum."

Curriculum in India. "Against the background of the striking curricular developments that are taking place abroad, the school curriculum in India will be found to be very narrowly conceived and largely out-of-date. Education is a threefold process of imparting knowledge, developing skills and inculcating proper interests, attitudes and values. Our schools (and also our colleges) are mostly concerned with the first part of the process—the imparting of knowledge—and carry out even this in an unsatisfactory way. The curriculum places a premium on bookish knowledge and rote learning, makes inadequate provision for practical activities and experience, and is dominated by examinations, external and internal. Moreover, as the development of useful skills and the inculcation of the right kind of interests, attitudes and values are not given sufficient emphasis, the curriculum becomes not only out of step with modern knowledge, but also out of tune with the life of the people. There is thus urgent need to raise, upgrade and improve the school curriculum."

Why is It So ? "Most of the curricular revision attempted so far has been of an *ad hoc* character—not generally preceded by careful research, not based on adequate expertise and not followed by such necessary supporting measures as the preparation of learning materials, the orientation of teachers or the provision of the needed physical facilities. What is worse, the curricula are prepared at the State level and are prescribed uniformly for all the schools in the State. Such a procedure cramps the freedom of headmasters and teachers and renders experimental work almost impossible. It also makes curriculum revision very difficult and infrequent. This problem which faces education at all stages is particularly acute at that school level. It is this weakness of school education that compels colleges to spend time on what is essentially school work; and the content of higher education cannot be adequately deepened until the school curricula are upgraded and made more challenging".

Essentials of Curriculum Development. The Commission suggested :

(1) **Research in Curriculum.** The first is the need for systematic curricular research so that the revision of the curriculum may be worked as a well-co-ordinated programme of improvement on the basis of the findings of experts instead of being rushed through haphazardly and in a piecemeal fashion, as often happens in many States today. Facilities for such research should be established in the universities, in the secondary training colleges in the State Institutes of Education and in the State Boards of School Education. It would also be advantageous to have some experts in curriculum on the staff of the State Boards of School Education who would work in close collaboration with the State Evaluation Organisations and the State Institutes of Education.

(2) Preparation of Text-Books and Other Teaching Aids. Basic to the success of any attempt at curriculum improvement is the preparation of suitable text-books, teachers' guides and other teaching and learning materials. These define the goals and the content of the new programmes in terms meaningful to the school, and as actual tools used by the teacher and pupil, they lend substance and significance to the proposed changes.

(3) In-Service Education of Teachers. In addition to this, it is necessary to make the teacher understand the chief features of the new curriculum with a view to developing improved teacher competence, better teaching skills, and a more sensitive awareness of the teaching learning process in the changed situation. Accordingly, an extensive programme of the in-service education consisting of seminars and refresher courses, should be arranged to orient the teachers to the revised curriculum.

(4) Relating Curricula to Available Facilities. A curriculum should be related to the quality of teachers, the facilities available in the school and the needs of the students with reference to their socio-economic background. These vary immensely from one institution to another. Consequently, a single State curriculum designed to serve the needs of average school ceases to be meaningful for the large variety of institutions and fails to provide an adequate challenge to the better ones. The solution lies in making it possible to device and adopt curricula suited to their own needs and to vie with one another in upgrading them.

(5) Freedom of Schools. Schools should be given the freedom to devise and experiment new curricula suited to their needs. A lead should be given in the matter by training colleges and universities through their experimental schools.

(6) Preparation of Advanced Curricula. Advanced curricula should be prepared by State Boards of School Education in all subjects and introduced in a phased manner in schools which fulfil certain conditions of staff and facilities.

(7) Formation of Subject Teacher Associations. The formation of subjects will help to stimulate experimentation and in the upgrading of curricula. The State, Education Departments, State Institutes of Education and NCERT should help the Associations in their educational activities and co-ordinate their work.

Standards of Attainment at the Different Stages. Though the curriculum of the first ten years of general education covering seven years of primary education (four years of lower primary and three years of upper primary) and two or three years of lower secondary education should be organised as a continuous programme of studies, the standard of attainment at the end of each sub-stage in the total course should be clearly indicated. These standards should be defined in terms of the knowledge, skills, abilities and attitudes to be developed with reference to the overall objectives of school education.

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Special Features of Curriculum at Each Sub-Stage

(1) **Lower Primary Stage.** (Classes I—V).

- (a) One language—the mother-tongue or the regional language.
- (b) Mathematics.

(c) Study of the Environment (covering Science and Social studies in Classes III and IV).

(d) Creative Activities.

(e) Work-experience and Social Service.

(f) Health Education.

(2) **Higher Primary Stage** (Classes VI—VIII).

(a) Two languages—(i) the mother-tongue or the regional language, and (ii) Hindi or English.

Note. A third language (English, Hindi or the regional language) may be studied on an optional basis.

(b) Mathematics.

(c) Science.

(d) Social Studies (or History, Geography and Civics).

(e) Art.

(f) Work-Experience and Social Service.

(g) Physical Education.

(h) Education in Moral and Spiritual Values.

(3) **Lower Secondary Stage** (Classes IX—X).

(a) Three languages—in non-Hindi speaking areas, these languages will normally, be (i) the mother-tongue or the regional language, (ii) Hindi at a higher or a lower level, (iii) English at a higher or lower lever. In Hindi-speaking areas, they will normally be (i) the mother-tongue or the regional language, (ii) English (or Hindi, if English has already been taken as the mother-tongue), and (iii) a modern Indian language other than Hindi.

Note. A classical language may be studied in addition to the above three languages on an optional basis).

(b) Mathematics.

(c) Science.

(d) History, Geography and Civics.

(e) Art.

(f) Work-Experience and Social Service.

(g) Physical Education.

(h) Education in Moral and Spiritual Values.

Curriculum at the Lower Primary Stage

The first two classes of the primary school should be graded as a single unit, and wherever possible, this arrangement should be extended to cover Classes III and IV. The proposed curriculum for these classes is very simple and reduces the load of formal subjects. Only language and elementary mathematics are to be specially emphasized with a view to developing the basic tools of learning. The study of the environment will be largely informal in the beginning and will be provided by making the child observe his immediate social and physical surroundings and talk in class about what he observes. In Class III environmental studies will gradually lead to social studies and science which may now be treated as regular subjects, but in a very elementary manner. While the activity method will permeate all teaching, special activities in the form of music, art work, dramatics and handwork should be organised for creative self-expression. Health education will stress the formation of good health habits. Work-experience will consist largely of handwork and social service will involve simple activities like cleaning the class-room, decorating the school, etc.

One important aspect of education at this stage, is reading with understanding. If proper foundations for this are not laid at this level, the entire future education of the child will receive an irreparable setback. Adequate attention has not been paid so far to research in beginning reading, to the evolution of proper methods of teaching reading to young children with phonetic scripts which the Indian languages have, to the preparation of graded vocabularies, to the designing of primers and readers for Class I, and to the evolution of tests of reading readiness or competence. It has not yet been possible to organize the proper training of teacher-educators at the primary level in these matters, and the average primary teacher generally tries to teach reading in a rule-of-thumb manner. It is the neglect of this crucial area that is responsible for a good deal of the stagnation at the lower primary stage. A study of these problems should be taken up in earnest and that a vigorous programme of improving reading instruction at the lower primary stage should be developed in all parts of country.

Curriculum at the Higher Primary Stage

When the pupil enters the higher primary stage, learning will become more systematic with greater stress on discrete subjects. The curriculum will broaden in respect of subject-coverage and deepen in respect of content. Teaching methods will become more systematic and standards of attainment more specific and definite than before. A second language either Hindi or English has now to be introduced so that a working knowledge in one of the two link languages may be attained by the end of Class VII. While only two languages will be compulsory at this stage, a pupil may study three languages—the regional language, English and Hindi—if he so desires, and facilities

will have to be provided for the teaching of third language in every school. Mathematics and science will receive greater stress than before. Social studies may continue as an integrated course if competent teachers and the requisite facilities are available; otherwise the study of history, geography and civics should be taken up as separate disciplines. Art and crafts will figure more prominently, the latter as a part of work-experience, and physical education and games will have their due place. A period or two a week should be allotted to education in moral and spiritual values in an organised attempt to develop the character of the pupils and inculcate in them a respect for religions other than their own. Social service activities will now include participation in the life of the local community.

Curriculum at the Lower Secondary Stage

The subjects that were studied in Classes V, VI and VII will be continued at the lower secondary stage; but with the increasing maturity of the students, their study has to gain in rigour and depth. Subject competence in science is particularly important in view of the phenomenal advances made in recent years in scientific knowledge, history, geography and civics and present day problems will be taught separately with such correlation as is natural and necessary. A third language—Hindi or English or a modern Indian language—will be introduced on a compulsory basis. Work-Experience will be organised.

I and II—Compulsory Teaching of Science and Mathematics for Ten Years

An Important Element in the School Curriculum. Science and mathematics should be taught on a compulsory basis to all pupils as a part of general education during the first ten years of schooling. In addition, there should be provision of special courses in these subjects at the secondary stage, for students of more than average ability. This programme can become meaningful and useful only if the science curricula are reorganised and brought up to date, the methods of teaching are vitalised and proper facilities are provided for the teaching of the subject.

Science in the Primary School. The aims of teaching science in the primary school should be to develop proper understanding of the main facts, concepts, principles and processes in the physical and biological environment. Both deductive and inductive approaches should be utilised to unravel these ideas, though more emphasis may be laid on the deductive approach or the use of the scientific method.

In the lower primary classes, the focus should be on the child's environment—social, physical and biological. In Classes I and II, the accent should be on cleanliness, formation of healthy habits and development of the power of observation. These should be emphasised again in Classes III and IV, but the study should include personal

hygiene and sanitation. The child may also be introduced to formal areas of science such as the plants and animals in his surroundings; the air he breathes, the water he drinks, the weather that affects his daily-life, earth he lives on, the simple machines that are being used in his environment, the body of which he should take care and the heavenly bodies he looks on at night. School gardening is an activity that should be encouraged especially at this stage, as it provides pupils with direct and valuable experience of natural phenomena.

The Commission also recommended that, in Class IV, children should be taught the Roman alphabet. This is essential as the internationally accepted symbols for the units of scientific, measurement and symbols for chemical elements and compounds are written in the Roman alphabet. Whatever one's language and the word for water, the chemical symbol for it is always H.O. And it is far more than a symbol, it provides an insight about the nature of water. Again, a knowledge of the Roman alphabet makes possible the use of maps, charts and statistical tables on an international scale. How expensive and time consuming it will be to make available this material in all the local languages !

At the higher primary stage, the emphasis may shift to the acquisition of knowledge together with the ability to think logically, to draw conclusions and to make decisions at a higher level. Science should now be taught as physics, chemistry, biology, geology and astronomy. The allocation of these subjects among the three classes is suggested below; but other combinations may be tried depending upon the level of the students and local conditions :

Class V Physics, Geology, Biology.

Class VI Physics, Chemistry, Biology.

Class VII Physics, Biology, Chemistry, Astronomy.

The general science approach to the teaching of science which has been widely adopted at the elementary stage during the last ten years has not proved successful as it tends to make science appear somewhat formless and without structure and runs counter to its methodology. A disciplinary approach to science learning would, it is felt, be more effective in providing the necessary scientific base to young people. The introduction of astronomy is specially commended, as it plays an important part in imparting good science education and in developing a rational outlook. From Class V onwards the Indian almanac should be studied by observation of the night sky.

Every primary school should have a science corner or a room to keep specimens, models and charts with the necessary storage facilities. A minimum of one laboratory-cum-lecture room should be provided in every higher primary school.

Science in the Secondary School. At the secondary level, science as a discipline of the mind and preparation for higher education deserves special emphasis. In the lower secondary classes, physics, chemistry, biology and earth sciences should be taught as compulsory subjects for all the pupils. Building on the introductory courses at the earlier stage, they should be made to cover wider areas and go deeper into the content than before. The changing character of the sciences should be the major factor in curriculum development.

Features of the Secondary School Science Curriculum. During the last few decades, the conceptual framework of physics has undergone a drastic change and this should be reflected in the high school physics curriculum. Similarly in chemistry, the stress hitherto laid on memorisation of facts, formulae, processes and compounds should give place to an emphasis on the unifying concepts in the subject. It is necessary to highlight the applications of chemistry in industry and daily life and its growing importance in our developing economy. Again the present content of the school course in biology is traditional in nature. The concept of biology as a method of inquiry by means of accurate and confirmable observations, quantitatively and mathematically analysed, and controlled experimentation should be impressed on the minds of the young learners. Earth sciences should be introduced in the secondary school, geology and geography being taught as an integrated subject. There are also many areas in chemistry, physics and biology to which certain topics in the study of earth sciences can be naturally related.

Science at the Higher Secondary Stage. At the higher secondary stage where diversification of studies will take place, science will not be studied on a compulsory basis by all the students. Those who opt for specialisation in the subject may take all three electives from the science group consisting of physics, chemistry, biology, geology and mathematics. But, as has been explained earlier, we are not in favour of rigid groupings and a science biased course can provide for a combination of two science subjects like physics and chemistry with an arts subject like economics. Similarly, it is possible for an arts student to take up the study of physics or biology or any of the other subjects in the science group as an elective. Such flexibility in the curriculum will not only help to prevent narrow specialisation, but will also make it possible to extend the benefit of the systematic teaching of science at the higher secondary stage to a much larger number of students.

Science in Rural and Urban Schools. In secondary schools in the rural areas, the linking of education to the agricultural environment can be done through integrated courses which bring out the impact of the physical sciences on biology. In view of the need to apply science and technology to Indian agriculture, it will also be desirable to introduce gradually the pupils in rural secondary schools to the ideas and practices of scientific farming and the activities and

skills related to it. Similarly, in schools in industrialised areas the curricula should have a bias towards the technical and industrial aspects of experimental science and its impact on industrialisation. The levels to be attained in the rural and urban schools should be the same and avenues to higher education should be available to students from both types of schools without discrimination.

Study of Mathematics

One of the outstanding characteristics of scientific culture is quantification. Mathematics, therefore, assumes a prominent position in modern education. Apart from its role in the growth of the physical sciences, it is now playing an increasingly important part in the development of the biological sciences. The advent of automation and cybernetics in this century marks the beginning of the new scientific-industrial revolution and makes it all the more imperative to devote special attention to the study of mathematics. Proper foundations in the knowledge of the subject should be laid at school.

Methods of Teaching Science and Mathematics

The Commission suggested :

1. Methods of teaching mathematics and science should be modernised, stressing the investigatory approach and the basic principles.
2. Guide materials should be made available to help teacher adopt this approach.
3. Laboratory work will need to improve considerably.
4. Teachers should be reoriented appropriately.
5. Flexibility should be provided in order to cater to the special needs of the gifted.

III. Social Studies and Social Sciences

The Commission considers that an effective programme of social studies is essential for the development of good citizenship and emotional integration and suggested :

1. The syllabus should stress the idea of national unity and the unity of man.
2. The scientific spirit and method of the social sciences should permeate the teaching of social studies at all stages.

IV. Work Experience

Keeping in view of the new social order, the Commission recommended that the work experience should be forward looking and it should take the form of simple handwork in the lower primary classes and of craft in the upper primary classes. At the lower secondary stage, it will be in the form of workshop training, and at

the higher secondary stage, work experience will be provided in the school workshop, farm or commercial establishments. The Commission also suggested that where school workshops could not be provided, suitable kits of tools and materials should be made available at low costs.

Some Essentials of Work Experience Programme

1. The training of teachers.
2. Provision of workshops.
3. Mobilisation of local resources.
4. Preparation of literature.
5. The phased introduction of the programme.

V. Social Service

The Commission suggested that programme of social service and participation in community development should be organised at all levels as suited to the different age-groups, in a phased manner.

District Organisation for Social Service Camps. The Commission recommended that the labour and social service camps should be run throughout the year in each district by a special district organisation set up for the purpose. It is envisaged that these camps will facilitate the organisation of Social service programmes in schools. Initially such programmes may be started on a pilot project in 5% of the districts and extended gradually to the others.

VI. Physical Education

Stressing the need for physical education, the Commission stated that the physical education is important for the physical fitness and efficiency, mental alertness and the development of certain qualities of character. The Commission felt that the programme of physical education as it was in force today, needs to be re-examined and re-designed in the light of certain basic principles of child growth and development.

VII. Education in Moral and Spiritual Values

The Commission realised the need for education in moral and spiritual values and suggested that organised attempts should be made for imparting moral education and inculcating spiritual values in schools through direct and indirect methods with the help of the ethical teachings of great religions.

The Commission recommended the setting aside one or two periods a week in school time-table for instruction in moral and spiritual values. The treatment of the subject was envisaged to be comprehensive and not divorced from the rest of the curriculum.

VIII. Creative Activities

The Commission suggested that a variety of co-curricular activities should be organised to provide pupils with opportunity for creative self-expression.

Art Education. The Commission recommended that Government of India should appoint a committee of experts to survey the present situation of art education and explore all possibilities for its extension and systematic development. Setting up of *Bal Bhavans* in all parts of the country with substantial support from the local community was suggested. Art departments should be set up in the selected university centres to carry out research in art education.

No Differentiation of Curricula for Boys and Girls. The Commission endorsed the recommendations of the National Council for Women's Education that there should be no differentiation of curricula on the basis of sex.

Home Science should be provided as an optional subject but not made compulsory.

Larger provision should be made for music and fine art.

The study of mathematics and science should be encouraged.

IX. Study of Languages

(See Chapter on Three Languages Formula)

The Three-Language Formula—How It will Operate in Different Classes. The following is the summary of the recommendations of the Education Commission on the Three-Language Formula :

Classes I—IV The study of only one language should be compulsory. It will naturally be mother tongue.

Classes V—VIII The study of two languages should be compulsory at this stage. The second language may be either the official language of the Union (Hindi) or the associate official language of the Union (English), so long as it is thus recognised.

Classes IX—X The study of three languages should be obligatory at this stage and one of these three languages should be the official language of the Union or the associate official language whichever was *not* taken up in Classes V—VIII.

Classes XI—XII The study of two languages should be compulsory.

Curriculum at the Higher Secondary Stage (XI and XII)

After the completion of the first ten years of schooling leading to the High School Examination, the special interest and abilities of the student will have been generally formed, and, with a good system of guidance and counselling, he can be helped in the choice of his

future career and educational course. An extensive and varied programme of vocational education should be provided at this stage. 50 per cent of those who wish to continue their studies beyond Class X are expected to take up full-time or part-time vocational courses and 50 per cent will be in courses of general education. The latter type of courses will be diversified to enable the students to select for special study a group of any three subjects based on the work already done at the lower secondary stage. As in the existing higher secondary scheme, the primary object of the new diversification is to provide opportunities in the last two years of schooling for the development of the special academic interests of the students.

Subject Areas in the Higher Secondary Course (Class XI and XII). The existing one-year higher secondary course will soon have to be recognised to cover a two-year period. The whole question of the higher secondary curriculum will have to be carefully examined and the details worked out by an expert body consisting of representatives of the universities, State Boards of School Education, and State Departments of Education.

(1) Any two languages, including any modern Indian language, any modern foreign language and any classical language.

(2) Any three subjects from the following :

- (a) An additional language.
- (b) History.
- (c) Geography.
- (d) Economics.
- (e) Logic.
- (f) Psychology.
- (g) Sociology.
- (h) Art.
- (i) Physics.
- (j) Chemistry.
- (k) Mathematics.
- (l) Biology.
- (m) Geology.
- (n) Home Science.

(3) Work-Experience and Social Service.

(4) Physical Education.

(5) Art or Craft.

(6) Education in Moral and Spiritual Values.

Advanced and Enrichment Programmes at Different Stages. The State Education Departments should prepare advanced courses in the

different school subjects and good schools should adopt these courses by introducing the changes in one or two subjects in the beginning and gradually covering the entire school curriculum in a phased programme suited to their convenience. Even where it is not possible for a school to adopt an advanced course in a subject for all its pupils in a particular class, it can give the benefit of such a course to the gifted children. In other words, a good school can have two kinds of curricula at a particular stage or even in a particular class—one being the common curriculum for the pupils who are average in ability, and the other being an advanced curriculum for the very bright pupils.

Curriculum Suggested by the Secondary Education Commission 1952-53 (IX to XI)

The present curriculum is inadequate, insufficient, unsatisfactory uninspiring and unscientific. It is not in conformity with the principles as discussed in a previous chapter. It is narrow in outlook. It fails to satisfy the needs of both the individual and the society. Keeping in view the changed political, economic, social and cultural set-up of the country, the Secondary Education Commission envisaged the following curriculum of a Higher Secondary School.

- A.
 - (i) Mother tongue or Regional language or a Composite course of the mother tongue and a classical language.
 - (ii) One other language to be chosen from among the following :—
 - (a) Hindi (for those whose mother tongue is not Hindi).
 - (b) Elementary English (for those who have not studied it in the middle stage).
 - (c) Advanced English (for those who had studied English in the earlier stage).
 - (d) A modern Indian language (other than Hindi).
 - (e) A modern foreign language (other than English).
 - (f) A classical language.
 - (i) Social Studies—general course (for the first two years only).
 - (ii) General Science including Mathematics—general course (for the first two years only).
- C. One Craft to be chosen from the following list (which may be added according to needs).
 - (a) Spinning and weaving.
 - (b) Wood-work.
 - (c) Metal work.
 - (d) Gardening.

- (e) Tailoring.
- (f) Typography.
- (g) Workshop Practice.
- (h) Sewing, Needle work and Embroidery.
- (i) Modelling.

D. Three subjects from one of the following Groups.

Group 1. (Humanities)

- (a) A classical language or a third language from A (ii) not already taken.
- (b) History.
- (c) Geography.
- (d) Elements of Economics and Civics.
- (e) Elements of Psychology and Logic.
- (f) Mathematics.
- (g) Music.
- (h) Domestic Science.

Group 2. (Sciences)

- (a) Physics.
- (b) Chemistry.
- (c) Biology.
- (d) Geography.
- (e) Elements of Physiology and Hygiene not to be taken with Biology.
- (f) Mathematics.

Group 3. (Technical)

- (a) Applied Mathematics and Geometrical Drawing.
- (b) Applied Science.
- (c) Elements of Mechanical Engineering.
- (d) Elements of Electrical Engineering.

Group 4. (Commercial)

- (a) Commercial Practice.
- (b) Book-keeping.
- (c) Commercial Geography or Elements of Economics and Civics.
- (d) Shorthand and Type-writing.

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- (b) Book-keeping.
- (c) Commercial Geography or Elements of Economics and Civics.
- (d) Shorthand and Type-writing.

Group 5. (Agriculture)

- (a) General Agriculture.
- (b) Animal Husbandry.
- (c) Horticulture and Gardening.
- (d) Agricultural Chemistry and Botany.

Group 6. (Fine Arts)

- (a) History of Arts.
- (b) Drawing and Designing.
- (c) Painting.
- (d) Modelling.
- (e) Music.
- (f) Dancing.

Group 7. (Home Science)

- (a) Home Economics.
- (b) Nutrition and Cookery.
- (c) Mother craft and child care.
- (d) Household Management and Home Nursing.

E. Besides the above a student may take at his option one additional subject from any of the above groups irrespective of whether or not he has chosen his other options from that particular group.

A review of the above shows that a student of a Higher Secondary class is expected to take up the following subjects :—

- (a) Two languages of which one should be his mother tongue.
- (b) A general course in social studies and general science, if he has not taken up these or allied subjects among his optionals.
- (c) Group of special subjects chosen by him.
- (d) One craft chosen by him.
- (e) One additional subject chosen by him from any of the groups irrespective of whether or not he has chosen his other options from that particular groups. This subject will be taken up purely at his option.

Three Important Points Regarding Curriculum

In the end three points may be mentioned regarding the curriculum.

First the details of the curriculum and the methods of handling it are even more important than the curriculum itself.

Secondly, the curriculum relates to the academic subjects. Besides these, other co-curricular activities are expected to be given an equal importance.

Thirdly, the curriculum is for the child and not the child for the curriculum.

DIFFERENCE IN ORGANISATION OF THE CURRICULUM

as recommended by the Kothari Commission
and Secondary Education Commission

Curriculum of the First Ten Years. For the first seven or eight years of schooling, there will be an undifferentiated course of general education for all. Of these who continue their studies after Class VIII an estimated 20 per cent are expected to be provided with full-time or part-time vocational education. The remaining 80 per cent of the pupils at school should continue to receive general education for a further period of three years, without any diversification of studies, but with provision of courses at two levels and of options in creative activities and types of work-experience. In other words, for the vast majority of pupils there would be a single curricular stream from Class I to Class X, ending with the first external or public examination, and there would be no 'steaming' or specialisation in this general course.

Scheme of Multipurpose Schools. It will be seen that this proposal is quite different from the scheme of higher secondary education recommended by the Secondary Education Commission, which has been under implementation in certain States during the last ten years. This scheme required a diversification of studies at the end of Class VIII and the provision of a variety of courses for students in Classes IX to XI. A number of multipurpose higher secondary schools have been opened offering different groups of elective subjects to students in the last three classes. Students are divided into streams according to their optional groups, and the opportunities for further education are determined, by and large, in terms of the group selected.

Most of the students who join these schools have only one purpose in view—to pursue their studies further at a university. Consequently, streams like fine arts and agriculture and even the technical stream, which do not lead to popular courses at the university stage are taken up by few students, and the science course is at a high premium. At the present stage of our economy, a multiplicity of expensive courses catering for the special interests of small groups of students cannot be prescribed in schools of general education. An analysis of the different groups of electives in the existing multipurpose schools will show that comparatively few schools have more than three diversified groups, so that one of the main objects for which the schemes of diversification was introduced—to provide a variety of courses to suit the different interests—aptitudes and interests of adolescent students—has not been realised.

One of the major weaknesses in the scheme is that specialisation of studies begins too early. At the age of 13 or 14, the students are classified as belonging to the pre-engineering or the premedical section. The streaming of pupils in this way into specialised groups from Class IX upwards is undesirable. That recent world trends in secondary education are in the direction of lengthening the period of general education and postponing diversification and specialisation to the second cycle or senior stage of secondary education. In non-vocational schools a common curriculum of general education should be provided in the first ten years of school education and that diversification of studies and specialisation should begin only at the higher secondary stage.

**Important Differences between
the New (*i.e.* Kothari Commission) and
the Old (*i.e.* Secondary Education Commission) Schemes**

OLD

- (i) Seven categories of selected subjects.
- (ii) Restriction on the wide range of optional courses.

NEW

- (i) Two categories—Arts and Science.
- (ii) Greater freedom and elasticity in the grouping of subjects within the limited range.

Subjects Areas in the Higher Secondary Courses

1. Two years' course instead of one at present. Subjects like Logic, Psychology, Sociology, Geology, Work-Experience and Social Services, Craft, Education in Moral and Spiritual Values are the new subjects recommended for teaching.

2. Talented and gifted children can have studies in advanced courses and can appear in such examinations even if such a facility is not provided by the school.

3. No diversification favoured at Secondary Stage.

4. Organisation of courses at two levels—ordinary and advanced.

Text-Books

Need for Text-Books

1. They provide a skeleton outline to the course for the teachers, which they are required to clothe with flesh and blood by their verbal exposition of the subject-matter. They serve as guides of great utility, which keep the teachers within their track.
2. They furnish a common body of subject-matter basis to the course. The teachers as well as the students find prescribed facts of the curriculum readily available and in a relatively cheap and well-organised form.
3. Text-books supply proper stimulus to children of varying abilities, capacities and interests. They encourage self-education and independent study.
4. Text-books give uniformity to the work of instruction.
5. Text-books are the products of the master-minds and therefore, supply much useful information.
6. A text-book is also economical in so far as it can reach many hands simultaneously.
7. Text-books are indispensable in the plan of individual instruction, such as the Dalton Plan.
8. They are necessary for revision and mechanical drill.

Limitations.

1. The appeal of the text-book is indirect. It appeals to the eye alone through the printed words.
2. It is impersonal. It gives adult experience only.
3. Text-books are classified according to subjects and are split into separate divisions of the curriculum. This is against the child world.

Demerits of Text-Books

1. They tend to dominate the educative process. They have influenced the purpose, character and scope of the curriculum. They have dominated the method of instruction and the evaluating process. They have narrowed down the scope of the curriculum.

2. They do not provide for direct experience. The students get ready-made knowledge and therefore fail to assimilate it properly.

3. They introduce uniformity and rigidity for definite achievements and kill all initiative and spirit of both the pupil and the teacher.

4. Text-books are a great hindrance in the new methods of teaching like the Heuristic and the Inductive. The students get ready-made answers and this defeats the very purpose of introducing new methods.

5. There is every danger that the text-books may be used for the purpose of indoctrination of the ideas and beliefs of the party in power. In fact text-books have been used in many countries for the propagation of Fascist and Communistic ideas.

They are a potent instrument in the hands of the party in power to inculcate narrow nationalism and racial prejudices.

How to Use Text-Books. A text-book should be treated as a means and not an end in itself. It should be borne in mind that it is a useful means to help him in his study. The students should never have the impression that a text-book constitutes a boundary and his task is simply to learn what it contains and no more. A text-book should serve as a basis of his learning. A text-book does not provide the last word on the subject. A text-book is not to usurp the functions of a teacher. It is to supplement his work and not supplant it.

Can we do away with Text-Books ? We may not accept the sovereignty of a text-book but it must be admitted that a good text-book is an indispensable means or tool in the teaching-learning process, whatever scheme is adopted. It is neither desirable nor feasible for most of the teachers to do without text-books. The only point is that a text-book should be used very skilfully and intelligently. It should be treated as 'an obedient slave' and not 'a commanding master'.

Essential Characteristics of a Good Text-Book

1. The book should be suited to the age, ability and interest of the pupils.

2. It should be written by those who are to use it and should be written by one who fully understands the requirements of the children of that grade.

3. It should be related with the actual experiences of the children for whom it is meant.

4. It should inspire high ideals of common citizenship, human fraternity and internationalism.
 5. It should be related to the many fields of human activity. The subject-matter of the text-book should be related to everyday life.
 6. It should contain references to various additional books that may be studied for various activities and projects connected with the lesson in the text-book itself.
 7. Its get-up should be attractive.
 8. Its printing should be clear, bold and on good paper.
 9. It should be well-illustrated, especially the one meant for younger children.
 10. Language used in it should be simple and clear.
 11. It should be free from spelling mistakes.
 12. Vocabulary should be well selected.
 13. Its subject-matter should be up-to-date.
 14. It should be free from bias. No undesirable elements should be allowed to enter its pages.
 15. It should be moderately priced.
 16. It should be in the psychological order for lower classes and in the logical order for higher classes.
 17. In a language text-book, there should be small poems suited to the taste and interests of the students.
 18. It should contain questions and exercises at the end of every lesson for the purpose of recapitulation.
- Secondary Education Commission (1952-53) on the
Defects of Text-Books**
- The following defects were pointed out :—
- (1) The change-over to the regional language as the medium of instruction in the different States had led to the aggravation of the problem.
 - (2) Considerations other than academic determined the selections of books.
 - (3) Language was very defective.
 - (4) Text-books prescribed for a particular grade were either too difficult or too easy.
 - (5) The paper used was bad.
 - (6) The printing was unsatisfactory.
 - (7) Illustrations were poor.
 - (8) There were numerous spelling mistakes.

The Commission felt, "We are greatly dissatisfied with the present standard of production of school books and consider it essential that this should be radically improved." The question therefore of producing proper text-books for schools is one which should receive the earnest attention of both the State and Central Governments.

Recommendations of the Secondary Education Commission

1. With a view to improving the quality of text-books prescribed a high power Text-book Committee should be constituted which should consist of a high dignitary of the judiciary of the State, preferably a Judge of the High Court, a member of the Public Service Commission of the region concerned, a Vice-Chancellor of the region, a Headmaster or Headmistress in the State, two distinguished educationists and the Director of Education. This Committee should function as an independent body.

2. A fund should be maintained from the amount realised from the sale of publications which may be utilised for awarding scholarships and providing books and certain other amenities for school children.

3. The Text-book Committee should lay down clear criteria for the type of paper, illustration, printing and format of the book.

4. The Central Government should set up a new institution or help some existing Art School to develop training in the technique of book illustration.

5. The Central and State Governments should maintain libraries of blocks of good illustrations which could be loaned to Text-book Committees and publishers in order to improve the standard of book illustration.

6. Single text-book should not be prescribed for every subject of study, but a reasonable number of books which satisfy the standards laid down should be recommended leaving the choice to the schools concerned.

7. In the case of languages, however, definite text-books should be prescribed for each class to ensure proper gradation.

8. No book prescribed as a text-book or as a book for general study should contain any passage or statement which might offend the religious or social susceptibilities of any section of the community or might indoctrinate the minds of the young students with particular political or religious ideologies.

9. Frequent changes in text-books prescribed for study should be discouraged.

Recommendations of the Education Commission on Text-Books ?

The Education Commission 1964-66, wrote "The value of the text-book as an effective tool of learning and of diffusion of improved teaching methods has been indicated as—A good text-book, written

by a qualified and competent specialist in the subject, and produced with due regard to quality of printing, illustrations and general get up, stimulates the pupil's interest and helps the teacher considerably in his work. The provision of quality text-books, and other teaching and learning materials, can thus be an effective programme for raising standards. The need to emphasise it is all the greater because it requires only a relatively small investment of resources. Moreover, a quality book need not cost appreciably more than one that is indifferently produced."

Defects as noticed by the Commission in the Quality of Text-Books. Unfortunately, text-book writing and production have not received the attention they deserve. In most school subjects, there is a proliferation of low quality, sub-standard and badly produced books, particularly in the regional languages. This has been due to a number of factors among which mention may be made of :

1. the lack of interest shown by top ranking scholars so that the writing of text-books has been generally done, in actual practice, by persons whose abilities are far from equal to the task;
2. the malpractices in the selection and prescription of text-books which defy control;
3. the unscrupulous tactics adopted by several publishers;
4. the lack of research in the preparation and production of text-books; and
5. the almost total disregard by private publishers (who were interested only in profits) of the need to bring out ancillary books, such as teachers' guides to accompany the text-books.

State Production of Text-Books. As education began to spread, the text-book industry became one of the very profitable fields for investment and the evils of the type mentioned above became more conspicuous. The attention of State Governments was soon drawn to them and it was decided that, in order to eliminate them, the State Governments should take over the production of text-books. At present, most State Governments have adopted this policy and taken over the production of text-books. The extent to which this responsibility has been assumed shows considerable variations—some States have produced only a few books at the primary stage while others have produced all books till the end of the secondary stage. In one or two States, not only production but even distribution and sale of text-books has been taken over by the State.

Advantages claimed by the Commission. There have been some definite gains from this policy.

Private profiteering has disappeared and prices have been kept low. (i) The malpractices and intrigues which used to be so common a feature of what used to be called the 'text-book racket' have

also disappeared. (ii) The quality of books has improved in several instances although the general level of the books still remains poor and their standard does not often come up to what some of the well-established and efficient publishers are doing.

Defects. The main reason for this failure is that the Education Departments which have taken over the responsibility of text-book production have not adequately organised themselves for it. It is this weakness that is largely responsible for the shortcomings one often sees in State-produced text-books. *viz.*, failure to revise books for long periods, misprints, poor production, failure to supply books in time, etc. We do not desire to underestimate these deficiencies. What we want to highlight is two points, the first is that these weaknesses do not lead to the conclusion as some interested parties are ever eager to show, that State-production of text-books is wrong and the second is to emphasise the urgency for the Education Departments to organise themselves properly for this great educational responsibility they have undertaken.

Text-Books, Teaching Guides and Teaching Materials, and Recommendations of the Kothari Commission

The Commission stated that the provision of quality text-books and other teaching-learning materials is a key programme for raising standards at comparatively low cost and suggested the following programme :

1. Mobilisation of Best Talents in the Country. A comprehensive programme of text-book production at the national level should be implemented by mobilising the best talent in the country on the lines already carried out by NCERT. Such books will facilitate the definition and practical indication of expected standards. They will also help in national integration.

2. Autonomous Organisation for Text-Book. The Ministry of Education should take steps to establish in the sector, an autonomous organisation, functioning on commercial lines for the production of text-books at the national level, especially scientific and technical books.

3. Setting up of Small Committee. A small committee may be set up to work out the details of the project.

4. State Level. The effort at the national level should be supported and augmented by each State setting up an expert section for the production of text-books.

5. State Education Department. The preparation, try-out and evaluation of text-books should be the responsibility of the State Education Departments; the production aspect of the text-books may preferably be done by the State Education Department wherever possible through their own text-books presses.

6. **Student Co-operatives.** The sale and distribution of text-books are better left to student co-operatives and not be assumed directly by the Departments.

7. **Autonomous Body at the State Level.** The production of text-books and teaching aids at the State level should preferably be entrusted to an autonomous agency functioning in liaison with the Education Department.

8. **Continuous Revision of Books.** The machinery set up should be such that the text-books are subjected to continuous revision and improvement.

9. **Multiple Choice of Books.** At least 3 or 4 books should be produced in each subject to provide a multiple choice of books for the schools.

10. **Liberal Remuneration.** Liberal policies should be adopted for remunerating authors.

11. **No Profit, No Loss Basis.** The entire organisation of State production of text-books should be run on a 'no profit no loss' basis.

12. **Approval of Manuscripts.** Manuscripts should be invited from a variety of sources including teachers, and high level committee of professional persons should select and approve manuscripts.

13. **Teachers' Guides.** Teachers' guides and other instructional material should supplement text-books.

14. **Provision of Teaching Aids.** Lists of minimum teaching aids and equipment needed by each category of schools should be prepared and steps taken to provide the equipment to every school on a high priority basis.

15. **Collaboration with the All India Radio.** Education Departments should work with the All India Radio for the use of radio lessons, supplemented by printed guide materials for teachers and pupils. Broadcasting of special radio talks specially designed for teachers in the mornings and evenings will help teachers in lesson preparation. Sophisticated forms of newer techniques would not be suitable at present in the general run of schools but may be tried out experimentally in teacher training institutions.

Three Aspects of Text-Book Programme

There are really three aspects to the text-book production programme :

- (1) *Academic aspect which includes the preparation of text-books, try-out and evaluation ;*
- (2) *Production aspect which includes all matters relating to printing and publication ; and*
- (3) *Distribution aspect which includes storage, sales, etc.*

The first is the most important aspect, and the responsibility for it will have to be squarely accepted by the State Education Departments on the lines we have recommended above. The second is discretionary. We find that some State Governments have accepted direct responsibility for it and established separate text-books presses. This is the direction in which we should move. The third is really self-contained and is not inseparably linked to the first two.

National Policy. The Resolution issued by the Government of India on National Policy on Education (1968) reiterated that "The quality of books should be improved by attracting the best writing talent through a liberal policy of incentives and remuneration". It suggested : "The possibility of establishing autonomous book corporation on commercial lines should be examined and efforts should be made to have a few basic text-books common throughout the country."

National Integration : In 1968, the *National Integration Council* also discussed the problem of school text-books as it attached great significance to the proper use of them for purposes of national integration. The Council recommended that the State Governments should create an appropriate machinery at the State level for the improvement of school text-books in general and for using them effectively for purposes of national integration in particular, and the Government of India should set up a National Board of Text-books. In 1969, the Government of India established the *National Board of School Text-books* with the object of providing a forum to discuss all matters relating to qualitative improvement ; production, distribution and sale of text-books ; adopting criteria for text-books ; advising the Central and State Governments on all matters concerning text-books ; and recommending measures which would promote national integration through text-books.

First Meeting of the National Board

The Report of the first meeting held in April 1969 contains useful information about the existing situation regarding text-book programme in different States of India and recommendation regarding production, pricing, distribution and quality control of school text-books. The meeting recommended : State Education Department should assume direct responsibility of producing quality text-books ; Appropriate agencies such as text-book corporation or bureaux should be established for this purpose with the required autonomy and official support to work effectively on a no-profit-no-loss basis. Special measures should be adapted to improve the quality of text-books attracting best available talent to write text-books, conducting pre-production field tryouts, applying new technological innovations, etc. There should be a continuous evaluation of text-books, particularly those required for history, social studies, languages and sciences ; co-ordination should be effected through exchange of materials, production of certain materials at the national level, maintenance of a national centre for textual materials and the creation of Text-

books in the NCERT to undertake national programmes of research development, training and extension for all States.

At the time of this meeting Gujarat was the only State which had not nationalised school-books, but soon after this meeting Gujarat also announced its policy of nationalising school text-books and started work in this direction. The Department of Text-Book has since been established in the NCERT.

Second Meeting of the National Board

The meeting made the following four recommendations :—

- (1) A crash programme of evaluating school text-books, as proposed by Ministry of Education and Youth Services, may be launched.
- (2) Modern management techniques in the production of text-books should be introduced.
- (3) A statutory study may be made by investigating relevant issues, such as the number and nature of minority language groups in each State, and how text-books are provided in the minority languages.
- (4) Up-to-date estimates of the need for paper for nationalised text-books and that for note-books, etc., may be obtained from the States. They may be requested to work out projections of their paper requirements for the next 5 years.

Time Chart of Nationalisation of Text-Books at the School Stage

<i>Year of Nationalisation</i>	<i>Name of State/s</i>
1942*	Uttar Pradesh
1948	Jammu and Kashmir, West Bengal
1950	Bihar
1951	Kerala
1952	Haryana, Punjab
1953	Madhya Pradesh
1955	Rajasthan
1958	Andhra Pradesh, Mysore
1960	Tamil Nadu
1962	Nagaland
1963	Assam, Orissa
1968	Maharashtra
1969	Gujarat

*Note :—Though the decision to nationalise text-books in U.P. was taken in 1942 the actual nationalisation took place much later.

National Centre of Textual Materials

In pursuance of the recommendation of the First Meeting of the National Board of School Text-Book, National Centre of Textual Materials has been set up in the Department of Text-Books of the National Institute of Education. As a first essential step, the text books of different subjects and grades as are being used in different States and Union Territories are being collected. Only those text-books, supplementary readers, pupils' work-books and teachers' guide books that have been prescribed or approved by the State Departments of Education are being obtained. The collection includes the nationalised or state-produced text-books as well as the text-books produced by private publishers which are approved by the State Education Departments. The text-books and allied materials from some foreign countries are also being procured. The first phase of collecting text-books was initiated soon after the formation of the Department of Text-books in the N.I.E. in July 1969. The information regarding the receipt of text-books up to 15th April 1969 is given below :—

1.	Andhra Pradesh	170
2.	Assam	182
3.	Bihar	190
4.	Gujarat	157
5.	Jammu & Kashmir	118
6.	Kerala	192
7.	Madhya Pradesh	420
8.	Maharashtra	459
9.	Mysore	115
10.	Nagaland	70
11.	Orissa	21
12.	Punjab	100
13.	Rajasthan	345
14.	Tamil Nadu	100
15.	Uttar Pradesh	255
16.	West Bengal	259
17.	Delhi	133
18.	N.E.F.A.	96
19.	Tripura	112
20.	Central Schools	316
21.	Children Book Trust	116
22.	National Book Trust	341
23.	Children Readers	808
24.	N.C.E.R.T.	498
25.	UK/USA	226
26.	Thailand	18
27.	Philippines	13
Total		5830

Recent Developments

A Text-book Department was established in the N.C.E.R.T. in June 1969. Active co-operation between the N.C.E.R.T. and the State Councils of Educational Research and Training or similar organisations has been encouraged.

The following six States—Bihar, Gujarat, Kerala, Maharashtra, Mysore Orissa, have established high level text-book committees :—

At the national level Subject Teachers Associations for Science, Mathematics and English have so far been established. In regard to the District and State levels, State Governments have been requested to implement the suggestion. At the State level, Bihar, Madhya Pradesh, Mysore, have initiated action in the matter. Several other States appear to have Teachers Associations on subject-wise basis.

The N.C.E.R.T. has drawn up a programme of qualitative improvement of text-books. As an initial measure to help research in the field of text-books, a bibliography on preparation, production and evaluation of text-books has been compiled and published.

In all about 90 titles of Text-books in Science, Social Sciences, and Humanities have been published. Some of them have been reprinted to meet growing demands from the States and schools.

Consultancy services to States are provided from time to time.

National Centre of Textual Materials has been set up in the Department of Text-books, N.C.E.R.T. So far 5830 text-books and allied materials have been collected.

Nearly 300 foreign text-books have also been procured. Schemes for the development of Textual materials, specimen materials, source materials, extracts, illustrations etc., were finalised and preliminary work in this regard has commenced.

Initial steps have been taken in respect of research development and clearing house services to be rendered by N.C.E.R.T. pertaining to various aspects of the text-book programme. A survey of text-books in the country was completed by the Educational Survey and Data process Unit and a factual report has been compiled.

As a stepping stone for further work in this area, a comparative study of the syllabi in Social Sciences and Mathematics has been undertaken to locate common elements among them. A preliminary report of the study in the form of a detailed working paper was prepared.

Text-Book Printing Press Project. An agreement with the Government of the Federal Republic of Germany providing for the gift of three school text-book printing presses was signed in November 1967. The presses are to be set up at Chandigarh, Mysore and Bhubaneswar on a regional basis to serve the needs of the surrounding States for school text-books. The scheme is expected to cost the Government Rs. 450 lakhs during the Fourth Plan.

Dynamic Methods of Teaching

Recommendations of the Secondary Education Commission (1952-53)

1. The methods of teaching in schools should aim not merely at the imparting of knowledge in an efficient manner, but also at inculcating desirable values and proper attitudes and habits of work in the students.
2. They should, in particular, endeavour to create in the students a genuine attachment to work and a desire to do it as efficiently, honestly and thoroughly as possible.
3. The emphasis in teaching should shift from verbalism and memorisation to learning through purposeful, concrete and realistic situations, and, for this purpose, the principles of '*Activity Method*' and '*Project Method*' ; should be assimilated in school practice.
4. Teaching methods should provide opportunities for students to learn actively and to apply practically the knowledge that they have acquired in the class-room. '*Expression Work*' of different kinds must, therefore, form part of the programme in every school subject.
5. In the teaching of all subjects special stress should be placed on clear thinking and clear expression both in speech and writing.
6. Teaching methods should aim less at imparting the maximum quantum of knowledge possible and more on training students in the techniques of study and methods of acquiring knowledge through personal effort and initiative.
7. A well-thought-out attempt should be made to adopt methods of instruction to the needs of individual students as much as possible so that dull, average and bright students may all have a chance to progress at their own pace.
8. Students should be given adequate opportunity to work in groups and to carry out group projects and activities so as to develop

in them the qualities necessary for group life and co-operative work.

9. As the proper use of a well-equipped school library is absolutely essential for the efficient working of every educational institution and for encouraging literacy and cultural interests in students, every secondary school should have such a library; class libraries and subject libraries should also be utilised for this purpose.

10. Trained Librarians, who have a love for books and an understanding of students interest, should be provided in all secondary schools and all teachers should be given some training in the basic principles of library work, in the training colleges as well as through refresher courses.

11. Where there are no separate public libraries, the school libraries should, so far as possible, make their facilities available to the local public and all public libraries should have a special section for children and adolescents.

12. In order to improve general standard of work in school, necessary steps should be taken to produce text-books as well as books of general reading which are of distinctly superior quality to the books at present available.

13. Suitable literature for the guidance and inspiration of teachers should be produced by the Education Departments of all States; either the Office of the Director of Education or one of the training colleges should be adequately equipped for the purpose.

14. In order to popularise progressive teaching methods and facilitate their introduction, 'Experimental' and 'Demonstration' schools should be established and given special encouragement where they exist, so that may try out new methods freely without being fettered by too many departmental restrictions.

Education Commission, 1964-66 on Methods of Teaching

Elasticity and Dynamism. "In a modern society where the rate of change and the growth of knowledge is very rapid, the educational system must be elastic and dynamic. It must give freedom to its basic units—the individual pupil in a school, the individual teacher among his colleagues, and the individual school (or cluster of schools) within the system to move in a direction or pace which is different from that of other similar units within the system without being unduly hampered by the structure of the system as a whole. In this process, the freedom of the teachers is the most vital; it is almost synonymous with the freedom of the school; for the pupils can rarely be freer than the men and women who teach them. It will, therefore, be quite in order to equate the elasticity and dynamism of an educational system basically with the freedom of teachers".

General conditions necessary to promote elasticity and dynamism in methods of teaching.

1. Feeling of Reform in the Air. The individual teacher is most likely to try bold changes in teaching practice if there is a feeling of reform in the air and if he sees his small contribution as part of a major social revolution.

2. Eagerness of the Inspectorate. The experimenting teacher must have much more than the passive acquiescence of the school inspectors. He must feel that officers of the Education Department are personally eager to see experimentation and that they are willing, within reasonable limits, to accept a proportion of failures as part of the price.

3. Dynamic Supervisors. The Inspectors are the key figures in any reform of class-room practice. They are *Authority*, present and obvious. They should be consulted from the beginning, should know that their criticisms and suggestions carry weight, and should be made to feel that the proposed changes are, in some measure, *their* reforms. A school system can be no more elastic or dynamic than the Inspectors' reforms will let it be. This is why the in-service education of inspecting officers assumes great significance.

4. General Support of the Profession to Experimentation. The sympathy and support of headmasters and senior teachers must be won quite early in the programme if they are not to dampen all youthful ardour to experiment and explore. They may not want to break new ground themselves. But if they do not feel they are being passed by and that the new system is not being foisted on them, they can become its patrons, if not its practitioners. There is also much to be gained by winning the approval of teachers' organisations to any movement that increases flexibility in the school system. Individuals will experiment more readily if they feel that experimentation has the general support of the profession.

5. Team Work and a Sense of Security. Anything that breaks down the isolation of the teacher increases his sense of assurance and makes it easier for him to adventure. The strengthening of the teachers' sense of inner security is a purpose common to all the methods advocated to increase the elasticity or dynamism in a school system. It is the basis of all real reform in teaching practice. There are occupations where a mass advance can be achieved by the invention of new equipment and the issuing of instructions for its use. No worthwhile advance is possible in teaching method unless the individual teacher understands what he is doing and feels secure enough to take the first new steps beyond the bounds of established practice. It is easier for a teacher to do so in a small group than when he is working alone. The success of 'team teaching' in introducing new teaching techniques into some American schools is based on the fact that it is not the individual but the team that is responsible for the planning and execution of new methods. It is our belief that the proposed

organisation of a school complex in which the teacher works in a cooperative group is more likely to help flexibility than the present system of isolation.

6. Mastery of the Subject-matter. Nothing reduces a teacher's sense of security or his willingness to take advantage of freedom so seriously as does his ignorance of the subject-matter he has to teach. If he is only a few lessons ahead of his class he dare take no risks, and finds safety in the old routine of rote memorising. Increasing the teacher's level of general education is, in general, the surest way of ensuring that some of them will adopt livelier and more meaningful methods of teaching. Fortunately, the limiting factor is not so much the absolute amount of knowledge the teacher has but the gap between what he knows and what his pupils know. Consequently, the easiest place to introduce innovations is in Classes I and II. There is also a great advantage in taking the lowest classes of the school as a starting point for reform, since it is at this level that the greatest 'pupil-wastage' occurs through repetition and drop-out.

7. Role of Teacher's Training Institutes. When in doubt, teachers will teach in the way they were taught themselves and not in the way they were told to teach. So, if a school system is to become more flexible and teaching methods more lively and varied, it is essential that these qualities be established very early in the *practice*, as well as in the *theory*, of at least some of the teacher training institutions. A few training institutions at both the primary and the secondary level should become centres for devising, testing, and adapting methods and materials to be used in the schools.

8. Cooperation of the Parents. A teacher or institution will be able to introduce innovations more easily if the parents of the pupils know enough about their purpose so as not to have any fear that they will interfere with their children's chances at the final examination. A strong and respected headmaster or teacher can probably best win over the parents by his own efforts; but in most cases, it will be necessary for the Department to help in convincing parents that changes in methods are desirable and officially approved.

9. Chances of Promotion. Innovations are more likely to occur if there is a ladder of promotion up which the bright young teacher can hope to climb by outstanding service.

10. Provision of Books and Materials. Obviously, elasticity or dynamism will be increased if there is a reasonable provision of books, teaching materials, and services that will enable some children to undertake part of their work alone or in groups. There is a limit to what can be expected of the most imaginative teacher if all he has is a bare room, a blackboard, a standard text-book, and sixty pupils. The most pressing needs for a teacher who wants to branch out on new methods are, therefore, a good supply of books and paper, and particularly at the lower levels of school education, some simple tools and materials for making equipment. If some teachers, in the

more poorly equipped schools, are to have a real chance to make use of any freedom they are given, it would seem desirable to have, at the disposal of the district education officer, a sum of money, not too tightly bound up by regulations, that might be used, with discrimination, in providing the minimum facilities and services to certain schools and teachers who show a special willingness and capacity to adopt new methods and standards of teaching. The amount of such aid should never be so great as to make any experiment expensive, unreal, and incapable of being applied widely. Too many 'pilot projects' are conceived on such an elaborate scale as to irritate teachers in the average schools and to be of little value to the system as a whole.

Language Laboratories and Programmed Learning

Talking machines, from the telephone to television, are playing an increasingly important part in our daily lives and in order to learn how to derive the greatest benefit from those we use in modern language teaching, we must turn to applied linguistics; for while it may take no more than ten minutes to learn to operate a tape recorder, it takes several months, at least, and sometimes even several years, to learn how to teach with one.

Language Laboratories

The Language laboratory, a term first coined in America, consists of a series of booths. Its novelty is purely relative. At first it was used in order to allow all members of a class to listen to records individually through headphones. Thanks to the tape recorder, now each person can hear the model record, his own speech and compare it with the model. It was long believed that merely to hear one's own voice, would automatically lead to self-correction; experience has shown that this is not true.

The term 'language laboratory' is currently applied to installations ranging from simple rooms containing seats fitted with headphones to fully sound-proofed premises equipped with closed circuit television. The product of a technological civilisation, the language laboratory is being used before its function has been properly defined. In its present form, it is only very rarely a research laboratory. It might, with greater truth, be compared to a gymnasium, since it is a place for individual training in the mastery of modern languages.

On entering a language laboratory, one notices that the room is properly sound-proofed and fitted with separate booths in which the pupils can sit and listen through headphones or small loudspeakers : when the booths are entirely closed, the pupils can speak into microphones, write or look at pictures. The main object is to let them hear a foreign language correctly themselves. It is a book for the ear.

There are two types of installation, varying according to their equipment ; both consist of intercommunication laboratories. The

booths are connected to a central console at which a monitor sits during practice sessions. The spoken models are relayed by means of records or tapes which can be diffused to all the booths. The pupil repeats or replies (depending on the nature of the exercise) during the silent interval left after every sentence at the time the model lesson is recorded. All the pupils in the booths listen to the same models. The monitor can interrupt the sound relay to one or more booths at any time and speak to one or more of the pupils. He can listen to the pupils without their being aware of it. Those pupils who are not in communication with the monitor continue their individual and joint practice. By providing each booth of an inter-communication laboratory with a tape-recorder, one increases the capacity of the installation for independent work. Instead of practising individually and jointly, the pupils can now work individually and separately.

Function of Pictures

There are pictures to go with every dialogue. Each answer has its corresponding illustrations. Since the conversation is intended to illustrate a structural pattern, the answers are so linked up as to form a brief story or 'grammatical tale' which provides the pupil with a motivation and justifies the sentences used.

The function of the picture is essentially a semantic one. In the class-room we present simultaneously a picture and a sentence; the picture represents a fragment of visual syntax just as the sentence is a fragment of speech. If the sentence to be taught is "He's reading his newspaper", the picture shows a man reading his newspaper.

Programmed Instruction ?

Programmed instruction is something essentially new in education. Yet it has many characteristics in common with a long used and well proved method of teaching which is familiar to all of us—the well conducted tutorial session.

One of the advantages of a tutorial session over a class is that the tutor can fit his teaching to the individual student; he can begin with something the student already knows, then lead the student at whatever pace best suits him through the new material he is expected to learn. This is precisely what programmed instruction also tries to do. The tutor usually takes the student by short logical steps through his learning experience, and makes sure that he understands each step. So does programmed instruction. The tutor keeps the student active—answering questions, practising the responses he is expected to learn. If the student makes a wrong answer, he is told at once. In all these respects, programmed instruction is a close parallel to a tutorial session.

However, when a student studies by programmed instruction, a programme replaces the tutor. The programme may be on paper,

which is usually called 'Skinnerian' after Professor B. Fred Skinner, of Harvard, whose studies of learning stimulated much of the work on programmed instruction. However, there are variations on this kind of programming. One is the 'intrinsic' programming, represented chiefly by the 'scrambled books' of Norman Crowder. This kind of programme presents an item containing some material to be learnt, then asks a multiple choice question to ascertain whether the student understands what he is supposed to have learnt. If he makes the wrong response, he is directed to a page where he receive more explanation, then tries the question again. If he makes the right response, he goes on to the next item. Another kind of programming is that of S. L. Pressey who forty years ago was constructing multiple choice review questions, programmed so that a student could not move from one question to the next until he had given the right answer. Research and trials have shown that students learn from each of these methods, but in the last ten years, and particularly the last five years, the great majority of programmes have been based on some variation of the Skinnerian or 'linear' form.

Can any subject be programmed ?

In theory any subject matter for which the learning objectives can be specified precisely in behavioural terms can be taught by programmed instruction. Obviously, the method lends itself to some subjects better than to others. It comes more naturally to mathematics than to art appreciation ; more naturally to learning correct grammar and language than to learning how to write essay : more naturally to science than to literature.

Can the method be used for people of any age ?

Any person old enough to be taught can learn appropriate skills or concepts by programmed methods. Programmes have been successfully used by pre-school children and adults far post-school age. Programmes have been devised for persons unable to read, persons unable to hear, fast learners and slow learners, including mentally retarded children.

What does programmed instruction mean to developing countries ?

The importance of programmed instruction is that it provides a powerful self-teaching device suited to a variety of subject matter and a variety of persons. To developing countries, short of trained teachers and schools, such self-teaching devices are especially attractive. And since the making of programmes requires close scrutiny of content and method, it is also advantageous to countries concerned with the re-study and revision of their curricula. Programmed instruction will not replace teachers in developing countries ; rather, it will aid teachers and extend good teaching to regions where teachers and schools are not at present available. It cannot do all that a school can do ; for example, it will not provide class discussion, or general reading, or comments on student papers and is thus

in no sense a substitute for an educational system, but rather an aid to such a system. It can relieve over-burdened teachers of certain responsibilities, allowing them to concentrate on others. Where teachers are not prepared to teach certain subjects, in many cases programmes can be used for the purpose. And where the need for learning, by youth or adults, far exceeds the available resources in teachers and facilities, programmes can broaden the opportunities of learning before more formal teaching is introduced.

Radio and Television

"In short, radio and television provide the class-room with windows on the world, with magic carpets that transport pupils to other lands, to other sections of their own land, and to new and different climate of opinion and culture," writes Levenson.

"Radio and television have created a new medium of education which we have not yet fully utilised. Like the printing press, radio and television also work a revolutionary advance in educational practice. If we can fully utilise radio and television, we can effect very great changes in our schools. The best teachers of the country can reach far wider numbers than is possible today. Lectures and books can be largely supplemented by radio, though there should be no question of the one supplanting the other. There is, after all, no substitute for a really good teacher, but just as books have been an aid to him, radio and television can also become his useful instruments" wrote Maulana Abul Kalam Azad.

Prof. C. L. Kapoor explains the importance of broadcasting in the book 'Radio in School Education'.

"The radio is not simply a mechanical device, adding merely to the reach and dissemination of the human voice, and creating opportunity for the teacher to speak classes in schools other than the one he is working in. It is much more. It can, in fact, claim to bring about a new development in educational method and practice. Educational programmes emphasise the social relevance of knowledge. They mitigate, in some measure, the defects of compartmental study of subjects. The conventional curriculum is organised around a systematic array of subject matter, neatly divided and sub-divided into heads and sub-heads. No thinking teacher will ever claim or concede that this is anything more than a convenience. But, this division can, sometimes, lead to the stressing of artificial distinction. School broadcasts are devised to counteract and mitigate this tendency. The broadcast is usually worked around real life situations and draws upon related and interrelated areas of knowledge to build up learning situations in the context of everyday experience of the listener."

HISTORY OF BROADCASTS TO SCHOOLS

Before Independence

Prof. C. L. Kapur observes :

"School broadcasting in India, though still struggling to gain

a toehold in education, can claim to have a history longer than that of All India Radio itself. In fact, as far back as 1927 two years before the establishment of the short-lived Indian Broadcasting Company, the Madras Corporation had a transmitter and put out, for Primary schools, educational programmes in Tamil. The Indian Broadcasting Company, which was established in 1929, too, occasionally put out informal broadcasts to schools. The company was, however, soon replaced by the Indian State Broadcasting Service and in 1932 the Calcutta Station put out broadcasts to schools. However, soon after their inception, they were abandoned. In 1935 was established the Department of Broadcasting, and it decided to close down broadcasts to schools in favour of more immediately remunerative and popular types of programmes. In 1936, the Indian State Broadcasting Service was rechristened 'All India Radio'. Demand for the revival of broadcasts to schools reappeared. In 1937, the University of Calcutta and the Department of Education, Bengal, jointly approached the All India Radio to resume broadcasts to schools, and in November of that year, Calcutta Station started a half-hour programme for schools for two days in the week. In many things, All India Radio has modelled its working and policy on the lines of the B.B.C. and like the B.B.C., A.I.R. set before itself the triple objective to inform, to educate and to entertain. Opinion in favour of educational broadcasts was rapidly growing in volume and becoming more articulate. It was, therefore, decided to launch upon school broadcasting, without insisting on any extensive installation of radio receiving sets in schools as a condition prior to the putting out of broadcasts to schools. All stations of All India Radio, then functioning, were directed to draw up, in consultation with the educational authorities of the Provinces, schedules of broadcasts to schools for the term October 1938 to March 1939. Delhi, Lucknow, Lahore, Peshawar, Bombay, Dacca, Calcutta, Madras and Tiruchi started putting out broadcasts to schools. New stations established subsequently did not, however, automatically take up broadcasts to schools. During the Second World War, which broke out in 1939, school broadcasts did not have much attention from the organisation.

After Independence

As in many other fields of progress, the real turning point in the development of the school broadcasting service came with the independence of the country in 1947. Up to 1951, however, no distinction was made between school licences and licences for domestic use ; and it is not possible to say how many schools did possess radio receiving sets. In that year, it was decided to reduce the licencing fee for educational institutions from Rs. 15 to Rs. 3 per annum and from then onward, figures for school licences in force are available. One way of assessing roughly the acceptability of broadcasts to schools is to study figures pertaining to school licences in force. In 1951, only 2380 schools possessed radio receiving sets. The succeeding year registered an increase of 600 licences. In 1953,

the number rose to 3830, thus registering a further increase of 858. Over the years, increase in the number of licences has been gathering momentum. During the last two years, it has been more marked. In 1956, 8296 licences were in force, and on the 30th September 1958, their number had risen to 10,878. Looking back over seven years, one finds that the number of radio receiving sets has risen to nearly five times of what it was in 1951."

In the Second Five-Year Plan, the Union Ministry of Education had a scheme providing fifty per cent subsidy to State Governments undertaking to equip schools with radio receiving sets and speakers in class-rooms. The Ministry of Education has also set up the Audio Visual Education Section and the National Board of Audio-Visual Education, on which A.I.R. is represented by the Chief Producer of Educational Programmes.

Advantages of broadcasting as a teaching medium

Amongst the advantages of broadcasting, and particularly television broadcasting, are the following :

(a) use of higher grade teachers and of better techniques to reach a larger audience, indeed, the best teachers of a country can be concentrated in a single programme ; (b) possibility of relieving over-worked class teachers and permitting the use of less highly trained teachers as 'class monitors', (c) standardisation of teaching materials, which can be carefully prepared and tested ; (d) possibility of reaching into people's homes for individual tuition, or reaching special audiences in remote areas ; (e) use for centralised teacher-training courses and regularity of programmes.

Limitation of the Radio and Television

1. The approach of the lesson is one-sided and impersonal. The students remain passive listeners.
2. Due to financial handicaps it is not possible to provide sets to every school.
3. Sometimes it becomes a problem to adjust the school time-table to meet the needs of television lessons.

Educational Television in the Fourth Plan

Following the Report of the preparatory Mission of Unesco—UNDP on Television Development and Training which visited the country in 1970 at the instance of the Union Ministry of Information and Broadcasting and also the recommendations of the Study Group appointed by the Ministry of Education and Youth Services, a programme for the introduction of educational television in India has been framed for implementation during the Fourth Plan period.

programme envisages the integration of television lessons with the ordinary class-room lessons and development of an integrated approach to audio-visual instruction by making full use of films, radio broadcasts and the expanded television coverage of the country. The implementation of the programme is estimated to cost about Rs. 106 lakh during the Fourth Plan period. In this context a request for foreign assistance has already been made. Another UNDP Mission has also visited India.

Supervision and Inspection

"The best type of inspection is that which aims at liberating the teacher from set procedures and making him self-reliant and enthusiastic in his work."

—Dr. M. Siddalingaiya

Meaning of Supervision. “At its best, supervision is the most noble and dynamic of all educational endeavour. It is the most noble because it is the most considerate, it is the most dynamic because it is the most creative”, writes Fred C. Ayer of the University of Texas. Supervision may be considered as a *service provided for helping the teacher to become increasingly a better teacher* and through this improvement to do a more effective job of leadership in guiding the learning activities of pupils.

In the words of Burton (W. H.) “The aim of supervision is the improvement of teaching.”

A. S. Barr and W. H. Burton think that, “Supervision is the foundation upon which all programmes for the improvement of teaching must be built.”

Kimball Wiles feels, “Supervision is a service activity that exists to help teachers do their jobs better.”

Thomas H. Briggs and Joseph Justman are of the view, “To supervise means to co-ordinate, stimulate, and direct the growth of teachers.”

Herold P. Adams and Frank G. Dickey remark that “Supervision is a planned programme for the improvement of instruction.”

According to Texas Education Agency, “Supervision is the process of bringing about improvement in instruction by working with people who are working with pupils. Supervision is a process of stimulating growth and a means of helping teachers to help

themselves. The supervisory programme is one of instructional improvement."

Arkansas State Department of Education thinks that "The purpose of supervision is to facilitate learning by pupils. Adequate supervision, therefore, is concerned with making adequate provision for all of the conditions which are essential to effective learning through effective teaching."

Another authority of the Curriculum Division of the Texas Education Agencies observes as, "We as supervisors have generally accepted the principles that the chief function of supervision is to help improve the learning situation for children; that supervision is a service activity that exists only to help teachers do their jobs better."

Sam H. Moorer describes as, "The term supervision is used to describe those activities which are primarily and directly concerned with studying and improving the conditions which surround the learning and growth of pupils and teachers."

Some describe it as, "Good supervision is a process of releasing energies of people in creative ways to solve individual and common problems."

Supervision is

- (a) Stimulating growth.
- (b) Giving service.
- (c) Helping teachers.
- (d) Improving instruction.
- (e) Facilitating learning.
- (f) Releasing energies.
- (g) Solving teaching problems creatively.
- (h) Appraising learning situations.
- (i) Providing instructional aids.
- (j) Improving curriculum.
- (k) Developing in-service education.

Aims of Supervision and Inspection. Different views have been put forward by various educationists regarding the aims and purposes of supervision and inspection. These may be summed up as follows :—

1. *To provide professional leadership* to educational institutions so as to improve their work and put them on right direction and path.

2. *To set suitable goals* for the educational institutions.

3. To appraise the work of the educational institutions and to give suitable criticism of work being carried on.

4. To offer technical service to teachers in the form of instructional aids, specific suggestions for the improvement of instruction and assistance in *pupil diagnosis* and measurement.

5. To develop in teachers a *growing recognition* of the factors that affect learning.

6. To help teachers to *define and use the purposes of education* as dynamic forces in their work with pupils.

7. To promote the professional growth of all teachers by providing them in-service training.

"The motto of the Inspector should not be "check your teachers, frighten your teachers, weaken your teachers and examine them" but its variant, "Train your teachers, inspire your teachers and trust them," writes an educationist.

Types of Inspections. The idea of a supervision should not be that teachers are not to be trusted and that two or three days of searching will reveal all the dark deeds. Inspections are of three types which are described as under :—

(1) *The Corrective Type.* This is also known as 'fault-finding expedition.' In this case, the Inspector visits a school to pick holes here and there and is always in the look out of bringing out inconsistencies and gaps to the notice of the head of the institution. Such an inspection does not serve any useful purpose. It simply makes the teachers unhappy. An Inspector must remember that progress depends upon a judicious combination of encouragement to good work and removal of defects. "The faults, he should try to remove, and the excellencies, he should praise."

(2) *The Preventive Type.* This type of inspection helps the teachers to anticipate new situations and to find ways and means to remove them. It is obvious that this type of inspection is very helpful to teachers.

(3) *The Creative Type.* A creative Inspector tries his best to stimulate the teachers so that he may do his best in all the activities of the school and liberates him from set procedures. Under the creative type of inspection the teacher feels free and willingly co-operates with others. It makes him self-reliant and enthusiastic in his work.

Organisation of Supervision and Inspection. The State Education Department organises the supervision and inspection on district level. We have a District Inspector of Schools helped by a number of A.D.I.'s of either sex for both kinds of schools, the boys and the girls in every district. On the helm of affairs, there is a Divisional Inspector in each division.

Contents of Supervision and Inspection

I. Supervision of Instruction Work. The Supervisor or the Inspector supervises the effectiveness of the methods of teaching used in a particular institution, the audio-visual aids employed to make teaching interesting and effective, the time-table enforced to carry out the instructional work, distribution of work among the members of the staff; distribution of the prescribed curriculum in suitable terms in the school year, *written work done by the students and experiments conducted etc.* In fact he is concerned with the entire planning of the instructional work. He inspects *the teacher's diaries also.*

II. Supervision of Co-curricular Activities. As the present education is not concerned with the mere teaching of three R's, the supervisors also supervise the work carried on in the co-curricular field. They are concerned with *scouting, games and sports, clubs, school government, school magazine, library service, hobbies, school museum, school exhibition and the like.*

III. Supervision of School Environment. The inspectors are concerned with the discipline of the students, their personal habits, their general behaviour, etc. They look into the cleanliness of the school surroundings, beautification of school, hygienic conditions of the school canteen, proper drinking water arrangements, cleanliness of urinals and latrines.

IV. Supervision of School Registers. The inspecting staff examines all sorts of school records and registers. Primarily they scrutinise academic records of the students.

V. Supervision of School Apparatus and Equipment. The supervisory staff examines the school apparatus and equipment and makes recommendations to the higher authorities for the provision of adequate equipment.

VI. Supervision of Developmental Aspects. The supervisors assess the school's participation in the social, cultural and recreational programmes of the community. They examine the various steps taken by the school to serve the locality in which it is located.

In fact the supervisors are concerned with the many-sided development of the children.

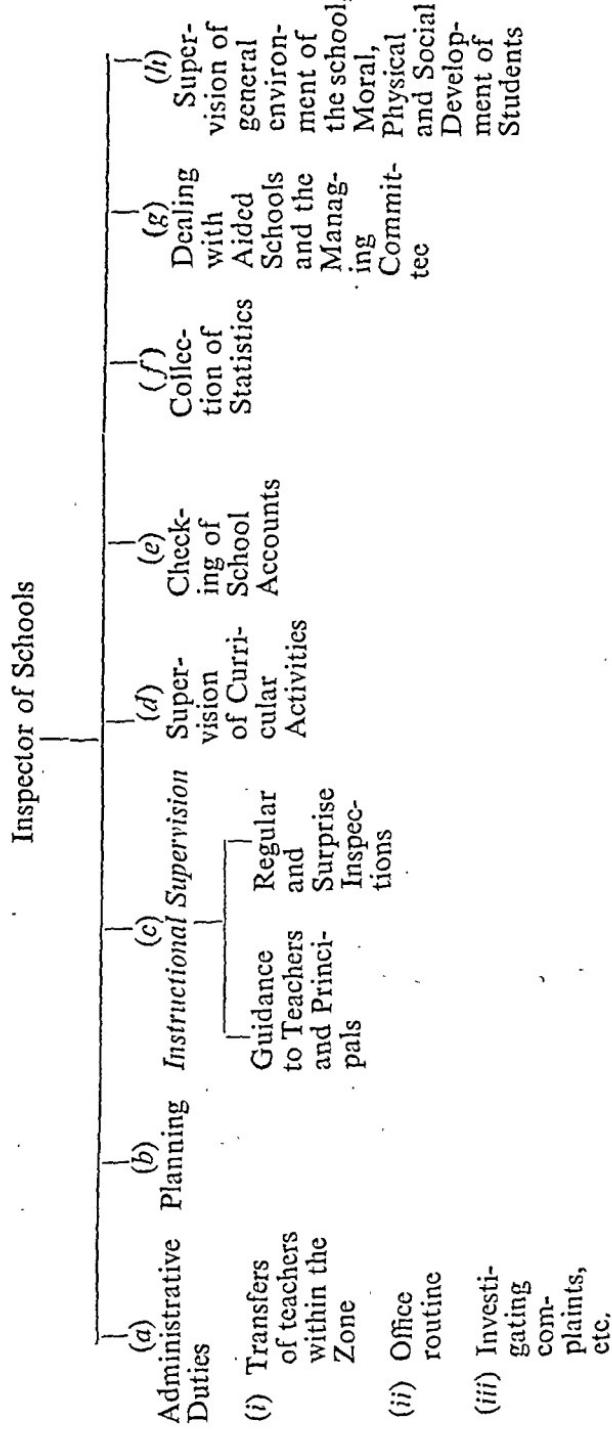
Supervision of Pupil's Growth. The supervisors are also concerned with the many-sided development of the children.

Supervision and Administration.

P. W. L. Cox and R. E. Langfitt write, "Administration executes, directs, supervision advises with, instructs, stimulates, explains, leads, guides, assists. Both plan, both diagnose, both inspect, but administration decides and orders execution, while supervision helps to decide and assist in improving instruction".

SCOPE OF INSPECTOR'S WORK

The work of an Inspector of Schools may be divided as under:



Administration represents the whole enterprise of school management and supervision represents a portion of it that is delegated to others by the administrators. Supervision represents a fractional part of the overall direction of the school enterprise.

Supervisory Procedures. A capable supervisor will not limit his supervisory procedures to the traditional class-room visits and the teachers' meeting. He will render assistance to teachers through such procedures as the following :—

I. Guidance. The supervisor or the inspector is expected to help the individual teacher or group of teachers to plan and carry forward out-of-class projects which have a direct bearing on the improvement of learning conditions. These projects are :—

- (i) Planning, testing programmes and constructing tests.
- (ii) Analysing test results and planning remedial procedures.
- (iii) Collecting supplementary materials.
- (iv) Undertaking special projects in the use of audio-visual aids.
- (v) Planning and initiating instructional devices suiting individual students.
- (vi) Conducting workshops for the study of special problems.
- (vii) Utilising community resources for enriching class-room teaching.

II. School and Class-room Visits. The procedures and techniques of visits are :—

- (i) Observation of the work of the teachers with a view to discovering opportunities for improvement.
- (ii) Relating the teacher with some special device for diagnostic purposes.
- (iii) Teaching demonstration lessons.
- (iv) Making suggestions to teachers regarding new devices and methods, supplementary aids, economy of time, pupil control, adapting methods to pupil differences, and so on.

III. Teachers Meeting and Conferences. This point may be illustrated under two headings :—

- (i) *Holding Conference with the individual teacher.* Such conferences will be held as a result of the class-room visits and observations as will involve consideration of teacher's weak and strong points and opportunities for improvement.
- (ii) *Holding Teachers Meeting for Consideration of Major Instructional Problems.* Points of common interests, some difficulties and certain policies are discussed and suggestions given to improve school work. Uniformity of work is aimed at.

IV. Management. The inspectors manage school activities so that schools run properly and smoothly. *Circulars are sent, directives are issued, and advice is given to schools to improve their work.*

Defects in the Existing System of Inspection. The main defects as noticed by the *Mudaliar Commission* in the present day system of inspection, are :—

(i) Inspections are *perfunctory*.

(ii) Time spent by the Inspector is *insufficient* and greater part of the same is taken up with routine work pertaining to *checking of accounts, time table, curriculum, etc.*

(iii) Enough time is not devoted to the *academic side*.

(iv) Contacts between the *teachers and inspectors are casual*.

(v) The *number of schools* entrusted to the care of an inspector is too large and the range too wide for him to be able to acquaint himself with their work and appreciate their problems ; nor he is in a position to advise and guide the teaching staff in improving the work of the school.

(vi) The inspector instead of being ‘the friend, philosopher and guide’ of the school, behaves in such a critical and unsympathetic way that his visit is looked upon with some *degree of apprehension, if not of resentment*. In the words of W. M. Ryburn, “The Inspector holds an extremely autocratic position, where, *if his will is exactly law, it is so near to it that for all practical intents and purposes, the teacher and the headmaster regard it as such.*”

(vii) To quote G. S. Shukla, “Till now the responsibility of inspectorate in education was considered synonymous with unquestionable authority and superiority demanding unqualified obedience and respect for the teaching profession.” He further calls the Inspector of Schools as an educational policeman.

(viii) There are no arrangements for experts in such subjects as Domestic Science, Arts and Crafts, Music, etc., with the result that these subjects remain unsupervised.

Principle of Good Inspection. Inspection, in order to be effective and fruitful, should be conducted according to certain principles which may be listed as :—

1. Inspection should contribute to the general efficiency of the school and to the professional growth of the teacher. H. M. Nutt observes, “That the supervisor exists for the sake of the teachers who work under his direction, and for the sake of pupils who work under the

direction of the teachers, may be stated as the first principle of supervision.

2. Inspection should be done very sympathetically. An inspector should carry with him an abundance of sympathy.

3. Inspection implies the impartial observation of facts. The inspector must maintain a scientific and critical attitude and should be free from prejudices.

4. Inspection should be very comprehensive and thorough. It should not merely be concerned with the financial aspect of school management and administrative details but should cover all aspects of school work.

5. Inspectors should try to assess the spirit of a school in addition to its instructional work. The spirit of school may be gauged from the records of staff meetings, co-curricular activities and any experimental work done in educational methods. The standard of discipline on the playing field and outside the class is a sure index of the spirit of a school.

6. The individuality of the teacher's methods should be respected. The inspector should not insist on 'deadly uniformity.' He should try to understand the methods employed by the teachers and appreciate the good points they contain.

7. The inspectors should not be 'misers' in giving praise when it is deserved.

8. Inspection should not be cursory in character. At least two or three days should be devoted. The work of the teacher should not be judged in a few minutes. More careful and longer supervision is necessary. Doing is always better than telling. Demonstration lessons by an inspector are more useful than pages of suggestions. However, it must be stressed that it is a wrong policy to give a demonstration lesson then and there when an inspector finds a class weak in a subject or finds unsatisfactory methods being used by the teacher. Such a step is likely to lower the prestige of the teacher in the eyes of the students.

9. The inspection staff should not expect impossibilities. They should *understand the local condition perfectly* well and then decide for themselves what progress may reasonably be expected.

10. The *written work of the students* should be carefully assessed. In the case of subjects with practical work, such as science, agriculture and drawing, the inspectors should always get *practical work done by the students*.

11. Inspection should not be confined to the four-walls of the school. As the school is to serve the community and is intimately

connected with it, the inspector should help the school to develop the proper contacts with the community and to improve its relations with the people.

12. Inspections must be planned in advance. They should not be a hit-or-miss affair. A good planned inspection will have a set of clearly stated objectives and will contain an outline of the devices, means and procedures which are to be used in the attainment of these objectives. It will also include clear-cut line of the criteria, checks or tests which are to be used to the results of inspection in order to determine the success or failure of the programmes.

13. *The academic work of the school should be thoroughly checked by a panel of experts with the Inspector as chairman.*

Democratic Supervision

The Autocratic Administrator or Supervisor

1. Thinks that he can sit by himself and see all angles of a problem.
2. Does not know how to use the experience of others.
3. Cannot bear to let any of the strings of management slip from his fingers.
4. Is so tied to routine details that he seldom tackles the larger job.
5. Is jealous of ideas.
6. Makes decisions that should have been made by the group.
7. Adopts this attitude 'I know best.'
8. Expects hero-worship.

The Democratic Administrator or Supervisor

1. Realises the potential power in thirty or forty brains.
2. Knows how to utilise that power.
3. Knows how to delegate duties.
4. Frees himself from routine details in order to turn his energy to creative leadership.
5. Is quick to recognise and praise an idea that comes from some one else.
6. Refers to the group all matters that concern the group.
7. Gives due consideration to the views of others.
8. Wishes to be respected as a just and fair individual.

9. Does not admit even to himself that he is autocratic.
10. Is greedy for publicity.
9. Consciously practises democratic techniques.
10. Pushes others to the foreground.

1. Checking List for Supervision of Instruction

Teacher.....

Date.....

Subject.....

Class.....

Note. Check in one of these three columns A.B.C. If a given feature does not appear, check in the column "No".

Class-room Management	No	A	B	C
1. Was sufficient attention given to lighting and ventilation ?				
2. Was the equipment of the room (for example, desks, black-boards etc.,) in order ?				
3. Were there sufficient audio-visual aids (for example, maps and charts) ?				
4. Were supplementary materials effectively arranged ?				
5. Was the teacher's voice pleasing and his enunciation clear ?				
6. Was the teacher's dress suitable ?				
7. Were the teacher's manners suitable ?				
8. Did the teacher show evidences of possession of the following qualities ?				
a. Self-control				
b. Tact				
c. Resourcefulness				
d. Sympathy				
e. Fair-mindedness				
f. Enthusiasm				
g. Decisiveness				

Class-room Management	No	A	B	C
9. Did the lesson begin and end in time ?				
10. Did the teacher handle laboratory material efficiently ?				
11. Were the students with defective sight or hearing seated on front desks ?				
12. Did students enter, leave and move about the room in an appropriate manner ?				
13. Were the postures of the students good ?				
14. Were pupils' responses well directed and expressed ?				
15. Was the attention of the entire class keen and continuous ?				
16. Was the group characterised by an attitude of courtesy and co-operation towards all its members ?				
II. Arrangement of the Subject Matter.				
1. Was the time effectively divided between (1) testing and drilling upon previous assignment (2) assignment and new material.				
2. Did the assignment involve activity of the group ?				
III. Teaching Devices.				
1. Were all pupils kept busy throughout the entire period ?				
2. Was there proper balance between teacher activity and pupil activity ?				
3. Was emphasis placed upon the formation of good habits rather than the acquisition of facts ?				
4. Was sufficient drill given to secure mastery of necessary skills and facts ?				
5. Did all the students participate in drill ?				
6. Were the questions suitable ?				

Class-room Management	No	A	B	C
7. Were the questions well distributed among the members of the group ?				
8. Did the pupils ask questions spontaneously ?				
9. Was there any evidence to show that the pupils had been taught how to attack and solve a problem ?				
IV. Aim.				
1. Did the teacher have a clear and worthy aim of the lesson ?				
2. Was the aim attained ?				

Things the Inspectors are Busy Doing—Functions and Duties

1. Demonstrating teaching techniques.
2. Conducting excursions of teachers of an in-service nature.
3. Writing reports of the work for school administrative offices.
4. Preparing bulletins to be circulated among the teachers of schools.
5. Helping teachers in lesson planning.
6. Holding conferences with principals and teachers in connection with the work.
7. Attending and contributing to faculty meetings.
8. Making suggestions for the proper use of school facilities in the case of over-crowded conditions.
9. Providing leadership in the establishment of testing and evaluation programmes.
10. Encouraging the use of special materials, such as audio-visual equipment.
11. Stimulating school library improvement.
12. Promoting voluntary study groups.
13. Attending state and national conferences, and report proceedings to teachers and principals.
14. Arranging for resource personnel from a college to help in a local study programme.
15. Using teachers to serve as demonstrators of teaching techniques in which they have been successful.

16. Helping teachers to set up experimental class-room procedures and to evaluate them.
17. Arranging professional reading lists for teachers.
18. Promoting carefully organised parent visiting days.
19. Interpreting the school programme to community groups.
20. Spread good ideas and practices of one school to another.
21. Setting up a central library of class-room books to help teachers and schools in their book selection.
22. Serving teachers and schools as specialists in sources of availability of films, free materials, books and instructional aids.
23. Using state and city library consultants in local school study programmes.
24. Promoting membership in appropriate professional organisations.
25. Setting up and participating in workshops and conferences for teachers.
26. Leading curriculum committees in the development of teaching guides or instructional material.
27. Co-ordinating the services of non-school agencies to aid in the work of teachers.
28. Helping the administration in the recruitment and selection of teachers.
29. Providing programme of orientation for new teachers.
30. Aiding teachers with special pupils, such as slow learners, problem students and talented students.
31. Helping and guiding teachers in the maintenance of registers, attendance reports and similar routine matters.
32. Aiding administrators with teacher assignments and classification of schools.
33. Taking responsibility in preparing radio and television programmes and interpreting the work of the school.
34. Participating in Parent-Teacher Association work.
35. Helping in celebrating school festivals and days.
36. Working with other supervisors and administrators in co-ordinating the entire programme.
37. Spending a limited portion of the week in the office, handling routine, concerning with teachers and visitors who come to see him.
38. Working to secure proper class-room equipment and class-room attractiveness.

39. Encouraging faculty surveys of pupil problems.
40. Contributing to a case study with a group of pupils.
41. Helping building proper working relationships within a school.
42. Making surveys of teachers opinion on a matter of common interest.
43. Advising teachers in handling clubs.
44. Preparing directions for the use of supplies.
45. Interpreting results of the standardised testing programme.
46. Assisting in the transfer of teachers.
47. Reviewing recent educational literature.
48. Preparing news articles for the local press.
49. Serving on committees of professional organisations.
50. Assisting formulating policies.
51. Interpreting regulations.
52. Assisting teachers deepen insights about their pupils through child study programme.

(Some of the points as enumerated by Harold Spears)

Qualities of a Good Inspector

Brilley suggests that the motto of an Inspector should not be, "Check your teachers, frighten your teachers, weaken your teachers, and examine them," but its variant, "Train your teachers, inspire your teachers, encourage your teachers and trust them."

1. Man of Educational Vision. He should be aware of new trends in education, lastest techniques in education, recent problems in the field and their solution. He should not merely assess the academic achievements of the schools but also the all-round progress of the school should occupy his attention.

2. Man of Faith. There is no use of being impatient, for growth and improvement always take time. The inspector must have a far-reaching programme, but putting through it, he should proceed item by item.

3. Man of Experiments. He must be an experimenter. An able inspector will select forward looking schools where the teachers and the headmasters have a progressive outlook on education and are imbued with the spirit of experimentation and will turn these schools nurseries wherein the seeds of educational reform and progress are sown, cared for and their progress carefully watched and the message carried to other schools.

4. Man of Planning. The inspector should plan his work thoroughly and should not undertake it at random.

5. Man of Sympathy. He should always show respect for the teacher's personality. A good inspector is one who can inspire and enthuse the teachers without dominating over them like a harsh task master. He should place the teachers on a footing of human equality. He should be co-operative, sympathetic and affectionate.

6. Constructive Mind. An inspector should possess constructive mind rather than a destructive one. He should never undertake a visit to a school with pure object of fault-finding. An inspector who fails to praise when commendation is deserved, is failing as much in his duties as one who fails to criticise when criticism is deserved. He should have a problem solving attitude and should help teachers in tackling the problems with which they are faced.

7. Organising Capacity. As he is to serve as 'teacher of teachers' he should have the capacity to organise refresher courses, meetings, seminars and discussions.

8. Expert in Various Subjects. An inspector should be a specialist in many languages and subjects. This is particularly important in our schools where different mediums of instruction are followed.

9. A Liaison Officer. The inspector should be a friendly liaison officer between the Department and the field workers, a mediator linking up scattered educational experience and experiments. Dr. Hart of the California University, a specialist in school administration has enumerated *seven abilities* which every administrator and supervisor should possess in ample degree to discharge his duties well. The first is the *ability to recognise the especially worthwhile things* that are taking place in the school system. The second is to organise the school system so that essentially worthwhile things discovered are *spared throughout the system*. The third is to *overcome the inefficiencies* of others without loosing their good will. The fourth is *to set goals that are within the reach of an individual*. The fifth ability is that of making everyone in the school system feel *worthwhileness of his job*. The sixth is that of helping everyone in the system to *grow professionally* and grow in service to society. And the seventh is to *make those who work for or with the administrator or supervisor personally happy*.

To sum up the qualities of an inspector, it may be stated that he should be a *man of learning, faith, pulsating with the life and energy and imbued with a spirit of progress* and experimentation and above prejudices of all sorts and *petty personal affiliation*.

Ideal Supervisors

Harold Spears writes in 'Improving the Supervision of Institution' that Ideal Supervisors

1. Are consistent.

2. Are not fault-finding.
3. Do not look for trouble.
4. Do not inject anxiety.
5. Accept teachers at their various levels.
6. Are patient.
7. Are courageous.
8. Attack complacency.
9. Do not elevate into importance petty details or their own whims.
10. Are not impressed by their own ranks.
11. Have skill working with groups.
12. Know effective class-room procedures.
13. Know instructional materials and their sources.
14. Are good resource people.
15. Know where to secure other resource personnel.
16. Are effective in their work.
17. Work hard but do not overdo it.
18. Have interests outside the profession.
19. Show no favouritism among teachers.
20. Look for ideas and abilities.
21. Do not shirk their responsibilities.
22. Commend effort and accomplishment.
23. Have faith in other people.
24. Get along well with people.
25. Can co-ordinate the efforts of many.
26. Are students of their field.
27. Exhibit emotional stability.
28. Maintain appropriate personal appearance.
29. Are ethical.
30. Give suggestions.

Selection of Inspectors. In view of the multifarious functions, an inspector is expected to perform, it is very essential that sufficient care is taken in the selection of the inspecting personnel. It is suggested by the Secondary Education Commission that a person to be chosen as an Inspector, should possess high academic qualifications (an Honours or Master's degree with teacher's training) and should have had teaching experience in schools for at least ten years or should have been a Headmaster of an High School for a minimum

period of three years. In addition to direct recruitment, the Inspectors should also be drawn from :—

- (i) Teachers of ten years' experience.
- (ii) Experienced Headmasters of High Schools.
- (iii) Qualified staff of Training Colleges.

The Commission further recommends that suitable persons from any of these categories may be appointed as Inspectors for a period of three to five years after which they may revert to their original posts. This will enable them to appreciate the position of the Inspector and to approach the problems of the schools with greater appreciation of the realities from their own experience.

Recommendations of the Education Commission on Supervision

Education Commission on the Importance of Supervision. A sympathetic and imaginative system of supervision and administration can initiate and accelerate educational reform. On the other hand, a rigid bureaucratic approach can stifle all experimentation and creativity and make any educational reconstruction almost impossible.”

Inspectors as the Key Figures

The inspectors are the key figures in any reform of class-room practice. They are *Authority*, present and obvious. They should be consulted from the beginning, should know that their criticisms and suggestions carry weight, and should be made to feel that the proposed changes are, in some measure, *their* reforms. A school system can be no more elastic or dynamic than the inspectors will let it be. This is why the in-service education of inspecting officers assumes great significance.

Defects in Supervision as Envisaged by the Education Commission

(i) the large expansion in the number of institutions which has not been accompanied by a corresponding increase in the number of inspecting officers ;

(ii) the combination of administrative and supervisory functions in the same officer which affects supervision adversely because administrative work, which has increased greatly in recent years, always has a priority ;

(iii) the use of supervisory officers, when they are members of the block development team, for non-educational work leaves them very little time for their own responsibilities ;

(iv) continuance of old techniques of supervision oriented to control rather than to development ; and

(v) lack of adequate competence in the inspecting staff.

Role of the Education Officer

"It is hardly necessary to emphasise the importance of the District Education Officer and his establishment at the district level. He is charged with the leadership function in relation to the district as the Director is in relation to the State. He supervises the Educational institutions at the school level and is assisted by one or more deputy inspectors and a number of assistant or sub-deputy inspectors who are responsible for the inspection of primary schools. In some districts, he belongs to Class I of the State-Service, but in a large number of other districts, he is still in Class II. In our opinion, neither status is adequate for the purpose".

"All things considered, the future of development and reform lies in strengthening the district officers of the Department, and making them service and supervision centres of all schools, and relating the State level Directorates only for general co-ordination and policy-making. This is the only way in which the weaknesses of the present departmental administration—rigidity, distance from schools, lack of contact with the local communities, emphasis on control rather than on service, etc.—can be remedied".

Strengthening and Improvement of the Inspectorate

(1) Adequate Status. The District Education Officer should be given adequate status. This can most conveniently be done by including this post in the proposed Indian Educational Service when it is created.

(2) Adequate Delegation of Authority. There should be adequate delegation of authority to the district level so that the district office can function with effectiveness and efficiency. In our opinion, the district office should virtually be the Directorate in so far as the schools are concerned, and the need for schools to go to the higher levels in administrative matters should be reduced to the minimum.

(3) Higher Pay and Selection. With regard to the inspectorial staff at the district level, there are three main weaknesses at present: inadequacy of number; comparatively poor quality of personnel because of the inadequate scales of pay; and lack of specialisation because most inspecting officers are 'generalists'. All these limitations will have to be overcome. It is, therefore, recommended that in upgrading of the scales of pay and recruitment of a higher quality of officers should be done immediately.

(4) Appointment of Specialists. The Commission also recommends that there should be an adequate specialised staff at the district level, e.g. in evaluation, curriculum improvement, guidance or special areas like physical education.

(5) Adequate Strength. It is also necessary to increase the strength of the district staff to cope with all the new responsibilities

delegated to it. In particular, there is need to provide a small statistical cell in each district office. It is the absence of this staff that is mainly responsible for the inordinate delays that now occur in the collection and publication of educational data.

(6) **Women Inspectors.** Similarly, a fair proportion of the staff at this level should consist of women officers, especially with a view to encouraging the education of girls.

(7) **Separation of Administration from Supervision.** The Commission suggests the separation of administration from supervision. The District School Board should be largely concerned with the former and the District Education Officer and his staff, with the latter. These two wings should work in close collaboration. When differences arise, the last word will lie with the District Educational Officer, who will have a higher status, or with the Director of Education. Under this arrangement, it will be possible for the District Educational Officer and the staff to concentrate on supervision proper, *i.e.* on improvement of instruction, guidance to teachers, organisation of their in-service programmes and provision of extension services to schools.

(8) **Two Types of Inspection.** The Commission proposes that in future every school should have two types of inspections—annual and triennial—and two different forms should be used for the purpose. The annual inspection will be more or less a departmental affair and will be carried out by the officers of the District School Boards for the primary schools and by the officers of the State Education Departments for the secondary schools.

In addition, there will be a thorough triennial or quinquennial inspection of every school. This will be organised by the District Educational Officer for the primary schools, and the panel will consist of an Inspecting Officer of the Department and two or three headmasters or teachers of primary and secondary schools selected for the purpose. In the case of secondary schools, this will be organised by the State Board of School Education and the panel will consist of an officer of the Department and some selected headmasters/educationists/teachers.

(9) **Flexibility.** One of the main characteristics of the new approach to supervision will be its flexibility in the treatment of different schools. It will have to provide support and guidance to the weaker schools, lay down guidelines of progress for the average school and give freedom to experiment to the good schools. It will have to assume responsibility for extending the process of continually deepening the curricula from school to school and of diffusing new methods of teaching which have been discovered and have proved their efficiency. The Commission emphasises the need for the provision for guidance and extension services to schools which becomes one of the major responsibilities of the new supervision; and it is from this point of view that the Commission has recommended that

Suggestions for Improving Supervisory Practices

1. Strengthening of the Supervisory Staff. A major part of the time of the Education Officer is being spent on administrative activities with the result that adequate time is not left with the Education Officer to discharge his supervisory activities. Keeping in view the present situation it is not advisable to separate the administrative and supervisory work. However, it is extremely important that one Deputy Education Officer is needed in each district to enquire into complaints.

2. More Clerical Staff is Needed. More clerical staff is needed to cope with the routine type of work of supervision and inspection. In many cases supervisory remarks remain untyped for months because of the shortage of typists and other clerical staff with the result that schools fail to derive immediate benefit from the supervisory remarks.

3. In-Service Training to Education Officers. The importance of in-service training to the Educational Officers can hardly be minimised. They must orient themselves with new thoughts and techniques in teaching-learning process.

International Conference on Public Education held at Geneva on July 9, 1956 suggested :

"Serving inspectors should be given every possible facility for further training (Conferences and vacation courses, seminars and above all, scholarships for study and travel abroad) and should also enjoy courses in audio-visual aids, a special library covering literature on new educational experiments, ideas and viewpoints and lectures by eminent educationists on school supervision and inspection, new trends in educational theories, child psychology, etc."

The view that the supervisors of education need some specialised training to enable them to discharge their duties efficiently has not been generally accepted in India yet. In fact, we seem to have proceeded on the tacit assumption that any intelligent person with a good general education and a sufficient stock of that rather indefinable quality, commonsense, may be trusted to conduct educational supervision in a satisfactory manner.

It is difficult to escape the conclusion that the absence of proper training in education in general and educational supervision in particular has been a significant contributory factor to the failure of the large majority of our supervisors to leave an impress on the Departments in their charge.

The professional training of this group has been far from satisfactory in the past and continues to be so even today. A certain percentage of the posts in this cadre are given to trained teachers on

grounds of merit and seniority. These officials have always been trained as teachers ; but their professional equipment has been defective.

The present position regarding the training of educational supervisors in India is far from happy. The study of educational supervision as a science has been almost completely neglected ; the universities have failed to provide adequate pre-service training courses in educational administration and supervision and the few courses that exist are neither well planned nor properly taught. Hardly any provision for the in-service training of administrative and supervisory staff is made at any level. No attempt is made to produce literature on the subject. Even the view that an administrator or supervisor of education needs specialised training is not generally accepted. If the efficiency of our educational administration and supervision is to be raised, these unsatisfactory conditions will have to be improved quickly.

Like all others in the field of education, the education officers also need constant in-service refresher courses, workshops and seminars.

4. Frequency of Inspections and Follow-up Work. With regard to frequency of inspection, it is suggested that there should be at least two in one year, one of them may be informal visit and the other regular annual visit. More visits are desirable specially in the case of those schools which in the view of the Education Officer require special measures to become educationally sound. Needs of each school should be ascertained and remedial measures adopted.

The remarks and suggestions of the Education Officer should be sent to schools within one week of the visit of the supervisor so that these may be considered by school personnel without delay.

School inspections without any regular follow-up programme do not prove to be effective. Planning of follow-up programme is as essential as regular inspection. There may be a few teachers in some schools who do not know the use of visual aids. There may be others who do not know how to use dynamic methods of teaching. In fact there are many such problems in the solution of which teachers require special assistance. The inspector's job does not end in merely pointing out the deficiencies but consists of finding out ways and means of solving them. This is the central problem in inspection which should be given adequate attention.

5. Preparation for Class-room Visitation. The supervisor should prepare himself adequately for a class-room visit. A wise supervisor will secure as much information as possible concerning the professional background and abilities of the teacher. In addition, he would know the general ability, social and economic background and general achievement of the students. This will enable him in studying the work and peculiar problem, if any, of the class-room situation.

Class visitation may be announced or un-announced. Announced visitation offers the teacher an opportunity to prepare the best work of which he is capable.

Un-announced visitation enables the supervisor to observe the normal class-room work. Such visitation is favoured by most of the principals and teachers.

The advantages and disadvantages of the two types of visitation suggest that no one type should be used exclusively. There should be a judicious combination of both.

6. Changes in the Techniques of Supervision. A technique is a method or way of doing things. A good technique gets the task at hand done skilfully and rapidly according to the plans, specifications or objectives associated with it. Without techniques supervision goes on in a haphazard, trial and error manner which is not only wasteful of time and effort but deadening in its effect. It is not safe to follow this dictum. Of course, when a complex situation arises, there should be no rigidity as to the applicability of specified techniques. In such a situation attempts may be made to evolve new techniques in the light of the previous as well as present experience. Moreover, since environmental conditions vary from time to time, teacher to teacher, subject to subject, and group to group, supervisory techniques cannot be wedded to any set theory and practice, and therefore, the Education Officer should have a plan ready in hand as to 'what', 'where', 'when' and 'how' to observe and revise the plans periodically.

7. Behaviour of the Supervisor. The supervisor should greet the teacher in a friendly and courteous manner. Usually he should seat himself at the rear of the room. Generally speaking he should not interrupt the work of the class or take over any part of the instruction. He should record his observations as objectively as possible.

8. In-service Training for Principals and Teachers but not During School Hours. Refresher courses, seminars, workshops, study circles etc., should be organised for the benefit of principals and teachers. These will enable them to be in touch with the day-to-day changes in the field of education. The present practice of deputing teachers and principals on working days needs to be modified. Make-shift arrangements are made to keep the classes occupied when some teachers are deputed for these programmes and this has an adverse effect on the regular class-room teaching. This provides an opportunity to the students to while away their time. The proper course would be to organise such courses on holidays and to give some incentive to teachers to attend.

9. Encouraging Professional Growth. Very little is done by the Education Officer for the professional growth of teachers.

One of the first requisite for a supervisor is to be skilful teacher. A number of teachers may also be asked to demonstrate the techni-

ques in which they are most successful. Discussion should always follow immediately after the demonstration. Observers should be given an opportunity to ask whatever question they wish. All suggestions should be made and accepted like an ideal sportsman.

Motion pictures and film strips may be used wherever possible.

The demonstrator should explain the application of principles in his procedure after the demonstration is over.

Adequate preparation should be made by the supervisor while giving a demonstration lesson as this is likely to serve as a model for teachers. It should be well thought and well planned and efficiently executed.

10. Inter School Visitation. In many cases teachers can offer valuable assistance or guidance to one another by mutually visiting their classes. For this it is very essential that a co-operative attitude may be developed among the teachers and the practice of inter-visiting of this type encouraged. New teacher or teachers facing problems in the use of a certain method of instruction may be suggested to visit a specific teacher or teachers known to be experts in the use of that method of teaching. Such visits should not be planned with a view that the teachers are required to pattern their work exactly after that of others.

11. Dissemination of Educational Literature. Supervisor may issue a bulletin at regular intervals for encouraging professional growth among teachers. Following type of material may be included in the bulletin :—

- (i) Abstracts or brief quotations from books, articles or speeches;
- (ii) References to articles appearing in current educational periodicals to which the teachers have access.
- (iii) News items of what various schools or teachers are doing ;
- (iv) News items of achievements in the Zone or Circle itself ;
- (v) Results of research, reports etc., which have come to the attention of the supervisors ;
- (vi) Brief reviews of the latest educational literature ;
- (vii) Articles from teachers and other educationists on different aspects of education ;
- (viii) Bibliographies of good references upon selected topics considered of immediate interest to teachers.

The Inspectorate of Education may take up the publication of an educational journal.

Strengthening of Teachers' Reference Libraries. Teachers may be stimulated to read literature on professional and general topics. This is possible only when reading material is easily available. Pro-

(v) in developing a wider outlook, leading to better understanding of the contributions that one's work can make to the large educational programme;

(vi) in appreciating obligations to one's fellow teachers in achieving the ends for which the school is maintained;

(vii) in developing increased will to grow and to keep on growing, with some knowledge of how that is possible;

(viii) in developing better professional attitudes;

(ix) in providing a programme of continuously improving education for the children.

The following procedures may be kept in mind while conducting a Conference :

(1) A good co-operative Conference demands that there should be friendly, sympathetic and professional relationships between the teacher and supervisor at the time of the Conference.

(2) The teacher may be allowed to present his evaluation of the class-work, to explain and justify the use of materials, methods and activities.

(3) A skilful Supervisor would create such a learning situation in which he helps the teacher to study and to utilise his work, to find means to solve his problems and to become more effective.

(4) The Supervisor should respect the teacher's opinion and point of view and never by tone of voice, manner, or language seem to belittle or ridicule the teacher or his opinions.

(5) The Supervisor should express his disagreement with a proposal, opinion or brief when he believes it to be unsound and should also allow the same freedom to the teacher.

(6) The Supervisor should try to find out the patent powers or

abilities which the teacher may possess and through kindly and sympathetic encouragement assist him to develop them.

(7) There may be some problems for which no immediate solution is available. In such situations, an experimental procedure should be adopted.

(8) The purpose of the Conference should be made very clear at the beginning so that the discussion takes place on the purpose of Conference.

(9) As far as possible the outcome of a Conference should be arrived at through the joint agreement of the teacher and the Supervisor.

(10) The Supervisor himself should evaluate the Conference when it is over. He may ask himself such questions :—

(i) Was the Conference well-planned ?

(ii) Was the teacher at ease ?

(iii) Did he participate in the Conference freely ?

(iv) Did the Conference help the teacher ?

(v) Was there any evidence to show that the Conference really helped the teacher ?

13. Contact with the Public. School in a democratic society is the source and centre of all development. Hence it is very necessary that the supervisory staff should maintain contacts with local people. At present such contacts are extremely negligible.

14. Need for Research and Its Relation to Supervision. Action research seems to be completely missing in our educational institutions. The present day requires research in the field of education on account of the growing emphasis on the democratic way of living. Shri. J. P. Naik feels, "In its absence, policies continue to be framed on the basis of subjective opinion of individuals—and very often, the same few individuals—and this generally leads to sectoral prejudices and the riding of hobby-horses rather than to comprehensive studies and radical reorganisation."

We are in a stage of transition and rapid changes are taking place in educational theory and practice and it is the business of supervision to assist the teachers to make this transition effective by doing research in various fields. The Education Officer must acquire a certain amount of knowledge and the skill in the field of educational research so that he can guide the teachers in conducting experiments with regard to the major and minor problems of the school. There are innumerable class-room problems which can be solved through simple experiments. The Education Officers must spend some time in encouraging and undertaking research.

15. Comprehensive Supervision. Supervision of the work of

- (8) Participation of the teacher in workshops, etc. ;
- (9) Class discipline ;
- (10) Maintenance of diaries; and
- (11) Examination results.

Apart from these aspects, his relations with colleagues may also be taken into consideration.

Work should be judged in the light of the class-room equipment, status of the locality etc.

16. Administrative Wing and Supervisor's Recommendations. The inspection reports generally do not receive their due attention at the hands of the administrative wing.

More importance should be given to the recommendations of the supervisory staff by the administrative wing as regards provisions of school furniture and equipment. Every recommendation must be given its due weight.

17. Spotting out Talented Teachers-State Awards. Education Officers should spot out talents among the school personnel. Subject experts in various fields from amongst the teachers may be requested to give demonstration lessons from time to time.

A scheme of State Awards for outstanding teachers should be evolved. While giving awards it should be ensured that a panel of experts in the same subject visits the classes of teachers and their collective recommendations given due consideration. Of course, class teaching would be one of the various factors that determine the giving of such awards.

18. Informal Contacts with School Staff. The Supervisory staff should establish contacts with the Principals and teachers and discuss their problems, difficulties and plans. Such meetings should be of an informal nature and be confined to small groups. After the regular class-room inspection it is desirable that the Education Officer convenes a meeting of the staff to discuss the problems and difficulties and give them fruitful suggestions. This helps the teachers to come in contact with the inspecting staff.

Programmes like teachers' get-together may be planned periodically and cultural programmes organised on such occasions. Cultural programmes presented by teachers and for teachers prove to be useful in harnessing their energies in fruitful channels and enriching the development of their personality. Educational Conferences and exhibitions may also be organised.

19. Change in Outlook. Attempts made in recent years to remove the barriers that exist between the supervisory staff and the school personnel should be accelerated. The supervisory staff should have a genuine desire to help the school staff and should always be prepared to co-operate with them to further the cause of education. This work is likely to be facilitated if the supervisory staff finds time to participate occasionally in some activities of the school like games, camps, social service programmes, etc.

Concluding Remarks. A perusal of these recommendations indicates that these can be implemented without involving expenditure which is not within the reach of the administration.

Secondly, it must be remembered that the theoretical books can only teach, it is the dynamic personality of the Education Officer that can bring about the necessary transformation and usher in an era of hope and faith. When the teachers feel that the supervisor is one of them and is there to help them as a true friend, philosopher and guide, they will be able to discuss all their problems with the supervisors. All this requires that supervisors must be endowed both with the qualities of head and heart, i.e., keep themselves abreast with the growing latest pedagogical literature as well as develop in themselves the behaviour pattern that would endear themselves to the teachers. This may appear to be a pious hope but the recent studies reveal that all people in the field of education right from the pupil up to the Department feel that the supervisor is an important link that can help the growth of educational institutions in the proper direction. We may bear in mind that *respect for personality is fundamental in democratic supervision. For it recognises each individual as a person in his own right and as such entitled to growth along the lines of his now social choices.*

Supervisor and School Improvement Programme

Need for an Evaluative Criteria

In a nation-wide school improvement programme as suggested by the Education Commission, the Supervisor can play an important role. For lack of resources it may not be possible to raise all schools to a high level within a shorter period. A strategy for development will have to be adopted in which schools may be classified into different categories and targets for improvement set before them. The Commission made the following recommendations in this respect :—

3. On the basis of such evaluative criteria, a scheme for the classification of schools should be devised on the basis of their performance. The factors to be considered for such classification may, among others, include : relations with the local community ; the qualifications of the staff and the continuity of the staff in the same institution ; in-service training programmes arranged by the school or participated in by members of the staff ; special programmes developed in the school such as experimental work, advanced or enriched curriculum, or new methods of evaluation ; attention paid to the gifted or retarded students ; school discipline ; wastage and stagnation ; results of public examinations ; scholarships secured by students ; after-school careers of past students ; and organisation of co-curricular activities and awards won by the school in these fields.

4. The classification should be made applicable to all schools—government, local authority and private. Norms may be defined at two levels—optimum and minimum and a three-point scale may be adopted on that basis :

- (a) *Schools* : above the optimum level.
- (b) *Schools* : average schools between the minimum and the optimum levels.
- (c) *Schools* : below the minimum level.

5. The general convention should be that each school evaluates its own work on the basis of the given criteria and the classification is then finalised by the inspecting officers of the Department in consultation with the school teachers and authorities.

Programme for Action

The Education Commission suggested the following programme for action :

1. The highest priority in the programme should be given to the creation of a minimum proportion of 'quality' schools at every

stage which would serve as pace-setting institutions. The number of really good schools in the present system is pitifully small, and in order to obtain good results in the shortest time, it is necessary to concentrate available resources in a few centres. As a first step towards improving all schools, therefore, we should strive to improve, during the next ten years, at least ten per cent of the schools at the primary stage to an optimum level. At the secondary stage, the target should be to have a good secondary school (*i.e.*, at the optimum level) in every community development block.

Evaluation and Examinations

The New Concept of Evaluation. The Education Commission 1964-66 observed, "It is now agreed that evaluation is a continuous process, forms an integral part of the total system of education, and is intimately related to educational objectives. It exercises a great influence on the pupil's study habits and the teacher's methods of instruction and thus helps not only to measure educational achievement but also to improve it. The techniques of evaluation are means of collecting evidence about the student's development in desirable directions. These techniques should, therefore, be valid, reliable, objective and practicable."

As the common method (and often the only method) of evaluation used at present in India is the written examination, a natural corollary of the acceptance of the new approach will be to improve the written examination in such a way that it becomes a valid and reliable measure of educational achievement. There are, however, several important aspects of the student's growth that cannot be measured by written examinations and other methods, such as observation techniques, oral tests and practical examinations, have to be devised for collecting evidence for the purpose. These methods need to be improved and made reliable instruments for assessing the students' performance and educational development.

"If examinations are to be of real value, they must take into consideration the new facts and test in detail the all-round development of pupils." —*The Secondary Education Commission*

Meaning of Evaluation and Examination. Evaluation was practically unmentioned before 1925 ; its chief mention in the literature of education has occurred since 1940.

One of the best definitions of evaluation is given by Clara M. Brown, "Evaluation is essential in the never ending cycle of formulating goals, measuring progress towards them and determining

the new goals which emerge as a result of new warnings. Evaluation involves measurement which means objective qualitative evidence. But it is broader than measurement and implies that considerations have been given to certain values, standards and that interpretation of the evidence has been made in the light of the particular situation."

Evaluation in its broader concept includes examination of academic and examination of non-academic aspects of education. This term 'evaluation' is a newly introduced term. According to Wrightstone, "Evaluation is a relatively new technical term, introduced to design a more comprehensive concept of measurement than is implied in conventional tests and examinations—evaluation involves the identification and formulation of a comprehensive range of the major objectives of a curriculum, this definition is in terms of pupil behaviour, and the selection or construction of valid, reliable, and practical instruments for appraising the specified phases of pupil behaviour." In examination and measurement the emphasis is upon the academic subjects only whereas evaluation includes all the changes that take place in the development of a balanced personality and measures the qualities of head, hand, health and heart of an individual.

H. H. Remmers and N. L. Gage point out, "It is the felt need that has caused the shift from the term 'measurement'—implying mathematically precise mensuration of knowledge—to the term 'evaluation' which widens the areas to be studied to include subjective opinions and qualitative changes as well as objective and quantitative changes to include changes in attitudes, appreciations, and understandings as well as acquisition of knowledge and skills."

Evaluation is a process by means of which changes in behaviour of children are studied and guided towards goals sought by a school.

Wiles defines evaluation as, "Evaluation is a process of making judgments that are to be used as a basis for planning. It consists of establishing goals, collecting evidence concerning growth or lack of growth towards goals, making judgments about the evidence, and revising procedures and goals in the light of the judgments. It is a procedure for improving the product, the process, and even the goals themselves."

Chester T. McNernly observes, "The purpose of any programme of evaluation is to discover the needs of the individuals being evaluated and then to design learning experiences that will solve these needs. ...Evaluation is an important and delicate process not only from the standpoint of determining the needs and growth of programmes and individuals but also from the stand-point of what it does to the individuals being evaluated...An evaluation cannot adequately be made by using a single check list, an isolated anecdotal record, or a battery of examinations ; a complete evaluation will require the use of many techniques."

(ii) If the purpose is to enrich and vitalise the course of study, evaluation must seek to determine whether the pupils are really deriving greater educational value from the 'enriched' and 'vitalised' programme than they did formerly.

(iii) If the purpose is to re-establish faculty '*esprit de corps*' and school morale, the objectives of evaluation will be to assess in various ways the degree of improvement in personal and professional attitudes in human relations, and ultimately, therefore, in efficiency of teaching and learning.

(iv) If an important purpose of the supervisory programme is to promote greater educational attention to individual needs of pupils, evaluation will necessarily concern itself with estimating the success with which guidance procedures, differentiated programme of study courses and units of learning experience, individualised teaching and learning procedures, and other educational measures designed to achieve greater satisfaction of individual needs are operating.

Shane and McSwain conceive evaluation, "as a process of inquiry based upon criteria co-operatively prepared and concerned with the study, interpretation, and guidance of socially desirable changes in the developmental behaviour of children...It is a process within the child as a result of which he responds to the psychological interpretations he makes of his school-community environment."

Correlation between the Educational System and the System of Evaluation. Evaluation cannot be done in a vacuum. It is always with reference to the objectives of a particular system of education. The traditional system of examination owes its origin to the objectives as laid down by Macaulay and as the objective of education was to produce a class of clerks, the examination system was also meant to serve that end. Our traditional type of examination, thus, is one-sided and concerned with the academic subjects only and entirely ignores the non-academic aspects. Here, too, it fails to measure scientifically and objectively the achievements of the students.

Evaluation has to be very comprehensive in a system of education which aims at the many-sided development of the personality of a child. "The school of today concerns itself not only with the intellectual pursuits but also with the emotional and social develop-

ment of the child, his physical and mental health, his social adjustment and other equally important aspects of his life—in a word, with an all-round development of his personality”, writes the Secondary Education Commission. In the light of these objectives of the system of education, a comprehensive programme of evaluation would include :—

1. Evaluation of the academic subjects.
2. Evaluation of the skills.
3. Evaluation of the physical development.
4. Evaluation of the moral development.
5. Evaluation of the social development.

Proposes of Evaluation

1. Evaluation appraises the status of and changes in pupil behaviour.
2. Evaluation discloses pupil's needs and possibilities.
3. Evaluation aids pupil-teacher planning.
4. Evaluation expands the concept of worthwhile goals beyond pure achievement.
5. Evaluation serves as a means of improving school-community relation.
6. Evaluation familiarises the teacher with the nature of pupil learning, development and progress.
7. Evaluation relates measurement to the goals of the instructional programme.
8. Evaluation facilitates the selection and improvement of measuring instruments.
9. Evaluation appraises the teacher's competence.
10. Evaluation appraises the supervisor's competence.
11. Evaluation serves as a method of self-improvement.
12. Evaluation serves as a guiding principle for the selection of supervisory techniques.

Aims of Evaluation. According to Reavis and others the evaluation should be affective in the following spheres *in addition* to the usual aims of *classification and promotion* :—

1. Providing a periodic check that will direct along definite lines on the continued improvement of the programme of the school.
2. Giving everyone working with pupils the information that is necessary to provide guidance and counsel for boys and girls.

Thomas H. Briggs and Joseph Justman write that evaluation is "a process by which the values of an enterprise are ascertained". Further they write, "Evaluation should be conceived primarily in terms of educational purposes which the programme of supervision is intended to serve."

(i) If the purpose is to stimulate teacher to improve their techniques of class-room instruction, evaluation must concern itself with ascertaining the extent to which such improvement is being affected.

(ii) If the purpose is to enrich and vitalise the course of study, evaluation must seek to determine whether the pupils are really deriving greater educational value from the 'enriched' and 'vitalised' programme than they did formerly.

(iii) If the purpose is to re-establish faculty '*esprit de corps*' and school morale, the objectives of evaluation will be to assess in various ways the degree of improvement in personal and professional attitudes in human relations, and ultimately, therefore, in efficiency of teaching and learning.

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2. Giving everyone working with pupils the information that is necessary to provide guidance and counsel for boys and girls.

3. Securing help in validating the function and the goal that the school strives to attain in determining the programme upon which the school operates.

4. Providing a sound basis for good public relation to secure an understanding on the part of a community of the school and its effectiveness, such an evaluation will meet many of the criticisms of the school expressed by the parents, tax-payers and others because they do not know what the school is attempting to be.

5. Providing a sense of security to members of the school staff, to pupils, and to their parents so that they have tangible evidence that the programme they are operating is an effective one.

Principles of Evaluation. Grim has suggested the following principles of evaluation :

1. In evaluation the complete picture may be taken into consideration as in learning the total personality is involved. Evaluation must take into consideration the difference in intelligence, state and rate of maturity, etc., and make proper allowance for these.

2. The effective appraisal demands that reliable, variety and relatively objective evidence be gathered.

3. Evaluation should enable the pupil to appraise himself.

4. The teachers, the parents, the pupils, the community and the administration all must participate in evaluation.

5. Evaluation to be effective must be continuous and cumulative.

6. Evaluation system must be closely related to the guidance programme.

Evaluation Devices. A good evaluation device or tool or method is one which can secure valid evidence of the desired change. It is not synonymous with paper and pencil tests.

Variety of Evaluation Devices

1. Essay type examinations.
2. Objective tests.
3. Achievement tests.
4. Aptitude tests.
5. Personality tests.
6. Tests of attitude and behaviour.
7. Questionnaire.
8. Check Lists.
9. Interview.
10. Anecdotal records.
11. Autobiographical records.

12. Case history.
13. Sociometric techniques.
14. Projective techniques.
15. Pupils Diaries.
16. Rating scales.

Modern Concept of Evaluation. Evaluation is the process of determining the extent to which an objective is being attained. It measures the effectiveness of the learning experiences provided in the class-room and finds out how the goals of education have been accomplished.

Evaluation and Examination Differentiated. Evaluation is not an extension of the usual written examination and marks in a subject, nor a means of judging the competence of individual teachers. Examinations are held periodically whereas evaluation is a daily process. Examinations may be external to the whole system of education whereas system of evaluation is a natural concomitant of our teaching process.

Triangle of Objective Learning, Experience and Evaluation. There is an inter-relatedness between objectives (ends), learning experiences (means) and evaluation (evidence). Objectives remain central to both learning experience and evaluation. Evaluation comes in at the primary stage when objectives are identified. Learning experiences are also planned in terms of objectives. At every point of learning evaluation is an attempt to discover the extent of the effectiveness of the learning situation in evoking the desired changes in students.

Things to be remembered in Evaluation. One cannot pass judgment on students by just testing them at the end of a course of instruction. The change occurs over a period of time and therefore no single appraisal can tell us completely of the change. It is necessary to determine the status of a student at the starting point. Then at periodical intervals evaluations have to be made and changes identified in comparison with his position at the starting point.

In Evaluation

1. One has to know where students were at the beginning if we are to determine what changes are occurring.
2. One has to obtain a record of the changes in pupils by using appropriate methods of appraisal.
3. One has to judge how good the changes are in the light of the evidence obtained.

What is a Good Evaluation Device. A good evaluation device or tool or method is one which can secure valid evidence of the desired change of behaviour. It is not synonymous with paper or pencil tests. It evaluates one specific performance of a student by rating his behaviour as it progresses and to sum up many casual observations of a student over a period of time.

Things that teacher should remember. In using a variety of evaluation techniques, the teacher must remember that :—

1. the choice of the tool depends on the type of evidence sought.
2. informal methods of evaluation are needed to supplement the evidence gained through formal paper pencil tests, and
3. the information secured through informal devices is as important as that obtained by the use of formal written tests.

Evaluation is useful in many ways :

1. It leads to improvement of instruction.
2. It helps to clarify objectives.
3. It promotes better learning.
4. It provides the bases for guidance.
5. It leads to curriculum changes.

Objectives Form the Core of Evaluation. Educational objectives themselves are determined by the needs of the learner, the demands of society and the psychology of learning. Since society is not static but undergoes changes all the time, since conditions of the world nowadays change very rapidly owing to the vast studies in science and since research in education brings to light new theories, objectives also change.

Need for Many Devices. One objective is different from another. Each objective implies several behavioural changes. It is obvious therefore that no single yardstick can suitably record the different types of changes. Each behaviour may need a different kind of device. Therefore we may have to use as many different devices as possible to seek and record the evidence of change. We shall have to ensure that each device we use is the most suitable one for securing evidence on a particular change.

Evaluation Devices Enumerated. There are many ways of gathering evidence on changes taking place in our pupils. Some of the devices are :

- (i) **Paper and pencil tests**—may be standardised or teacher made tests.
- (ii) **Observation** useful in appraising growth in habits and manipulative skills.
- (iii) **Interviews.** Interview with students to secure evidence concerning the growth of interests, change in attitudes, etc.
- (iv) **Questionnaires** about growth of interests and attitudes.
- (v) **Pupils products.** As paintings of pupils, skill and interest in painting.
- (vi) **Records.** Diaries of pupils, anecdotal and cumulative records. Children's diaries throw much light on their appreciation,

interests and attitudes and their personal and social problems. *An anecdotal record* is the teacher's description of significant pupil behaviour in an incident or critical situation. Even a library record of the pupil can indicate his reading interests.

(vii) **Rating Procedures.** They could be used both to evaluate one specific performance of a student by rating his behaviour as it progressed and to sum up many casual observations of behaviour of a student over a period of time.

The Place of Evaluation

Examinations have been in existence since times immemorial. "To close down examinations would be to give the signal for educational saturnalia", observed Sir Michael Sadler. J. C. Mathur emphasises the value of examinations when he writes, "Even in the idealised picture of society portrayed in H. G. Wells' Utopia examinations find an important place." "Nevertheless examinations—and specially external examinations—have a proper place in any scheme of education," writes the Secondary Education Commission. Examinations are good servants as they help to evaluate the achievement of our students. They are a great touchstone for measuring the amount of knowledge acquired or the degree of skill achieved.

1. Stimulate Teaching and Learning. Examinations have stimulating effect both on the teachers and the students. They place certain objectives before them and for the realisation of those objectives the students and the teachers develop in them the habits of constant hard work.

2. They Help the Teacher to Test and Improve his Teaching Method. They help to discover the specific weak points of an individual or class and thus give an opportunity to the teachers and the taught to remove these defects.

They provide a proper occasion to the teachers to know whether or not their methods of teaching are appropriate.

William A. Yeager writes, "Our examinations will reveal how far the students are following and understanding their lessons. Measurement is necessary in order to learn more of the pupils themselves, their individual and group achievements, their strengths and weaknesses, and propriety of their proper admission and classification and their promotion."

3. Measure the Efficiency of Institutions. They provide a suitable occasion for the authorities to measure the efficiency of the teachers. The efficiency of the institutions is also measured through these examinations.

4. Facilitate the Problem of Uniformity of Standard. They facilitate the problem of the uniformity of standard attained by the students of the different institutions.

They facilitate the work of grouping individuals for the purpose of teaching by bringing all those together who have more or less the same attainments.

5. Help in Discovering the Special Abilities. The examinations have a prognostic value also. They help to find out the aptitudes of the students.

6. Provide Training in Organising and Using Knowledge. They test the power of clear thinking, quickness of mind, calmness and perseverance.

Limitations of the Present System of Examination. In the opinion of the Wardha Committee. "As a measure of the work of individual pupils or the students, by a consensus of expert opinion, examinations are neither valid nor complete. They are inadequate and unreliable, capricious and arbitrary." W. H. Ryburn strongly criticises them when he writes, "It goes without saying that examinations are the enemies of creative work, at least as they are usually conducted." The University Education Commission has also expressed the similar opinion, "For nearly half a century the examination has been recognised as one of the worst features of Indian Education."

A number of epithets has been given to examinations :

1. An enemy of true education.
2. An incubus.
3. A blood sucker.
4. A bane of educational system.
5. A necessary evil.
6. A glorification of memory.
7. A begetter of rivalry and strife.
8. A dead hand of education.
9. A growing tyranny.
10. A presumptuous attempt to gauge the depth of human ignorance.
11. An obstacle to learning.

The main defects are as under :—

(i) **Examinations Lack Definite Aim.** Our examinations are not geared to the realisation of specific objectives. The same test serves different purposes like passing a course, admission to the next course, passport to employment, discovering individual capacities, securing scholarship etc., with the result that it becomes invalid for any purpose.

Sultan Mohiyuddin writes, "Business firms wanting employees look at the results of the examination, the high schools base their admission on it, and government accepts it as a passport to all departments of service ; there are no specific, mental or moral traits, and

disabilities that the ordinary examination seeks to discover and measure, and there is, therefore, no definite guidance it can offer to the professions, business houses and higher educational institutions."

(ii) **Element of Chance.** Element of chance plays an important role and decides the fate of the large number of students. It is often found that some students prepare a few selected questions and leave everything to chance. If perchance, the same questions are set in the examination, they pass with credit. The question arises, have they actually attained the requisite standard? Perhaps not! Now take the case of another student who has been regular in his work throughout the year. He might not secure as good marks as the one mentioned above. Should we conclude that the former is more intelligent than the latter?

(iii) **Lowering of Educational Standard.** According to the Secondary Education Commission, the examinations determine not only the contents of education but also the methods of teaching, in fact, the entire approach to education. The efficiency of a teacher is judged by the pass percentages of his results. The teachers adopt the trick of the trade to improve their results. 'Idea of exam,' the sole aim and 'Cram' the only method, dominates the entire educational system. The students do not feel interested in a subject unless it is included in the examination scheme. They are more interested in notes and guides rather than in text-books with the result that they ignore habits of independent study. Stress is laid on spoon-feeding and pupils are encouraged to memorise facts and vomit them out in the examination.

To quote the Secondary Education Commission, "The present system of examination does not test anything except memory and a certain kind of verbal facility."

Thomson called them, "a presumptuous attempt to gauge the depth of human ignorance."

Valetime rightly observed, "There is a grave danger of certain studies being cramped and spoilt by the prospect of an examination ahead."

P. C. Wren quotes Sir Oliver Lodge, "External examinations which have to be prepared for specially are hampering to the teacher. They tend to keep his attention directed to some artificial end—rather than to the immediate object of his work—namely the drawing out and development of the minds committed to his care."

(iv) **Lowering of Moral Standard.** Examinations teach the students different ways of becoming dishonest. Books are smuggled in the examination centre and attempts are made on the life of the supervisors who try to catch the students who use unfair means.

(v) **Ignore Qualities of Character.** They fail to provide any measure to test the originality, initiative, truthfulness, honesty, sociability of an individual and thus they fail to test real education.

Sultan Mohiyuddin writes, "Training in originality and independence of thought, correctness of judgment or reasoning, responsiveness to noble ideas and sentiments and enjoyment of beautiful things—these cease to be the aims of teacher's effort for they are not judged by the traditional examination. Examination is the sole aim and cram the sole method."

(vi) **Subjectivity.** Subjective attitude of examinations influences the marks of individuals and leads to a great variability in marking. Vernon points out, "The same script might receive a different mark if read after instead of before dinner."

Dr. R. K. Singh says, "Our examinations are subjectively weighed and subjectively scored and are not, therefore, dependable indices of pupils' achievement." The Harvard University Commission in English says, "Where the panel of readers (examiners) is large, where thousands of books are being rated, where physical conditions of weather and health are not always under control, and where practically all judgments are subjective, it would be indeed strange if discrepancies in ratings are not numerous, if mistakes are not frequent and costly".

(vii) **Heavy Mental Strain.** Most of the students are in the habit of working strenuously just near the annual examination and this severely tells upon their health, leads to mental dyspepsia and discourages the formation of healthy mental habits.

(viii) **Develop Frustration.** Failures in examinations lead to frustration and even to suicides in some cases.

As a matter of fact, the examinations have met with heavy criticism from all quarters. This criticism is due to the excessive development of the examination system and a large number of students subjected to it. Candidates complain against the examination system because of its mental strain; the teacher is against the examination because of its harmful influence on school work; the parent denounces it because of its injurious effect on the physical and mental health of the children; the practical psychologist speaks ill of it because of its unreliability and invalidity and the educational theorist attacks it because of its lack of definiteness in aim and purpose.

Remedies. (1) To minimise the subjective element, new type of objective tests should be introduced along with the essay type of questions.

(2) Questions put should be thought-provding and evenly distributed over the entire course. Difficult as well as easy questions should find a place in the question paper.

(3) Due consideration should be given to the work of the students done in the class. The teacher's recommendations should be given their due importance. He should be trusted and given a fair opportunity to know and study closely the pupils in his charge.

(4) Cumulative records should be maintained in respect of all the students.

(5) The paper-setters and examiners for external examinations should be drawn from the teachers who actually teach subjects in schools.

(6) Standard of marking should be prescribed so as to minimise the variability in marking.

(7) The system of permitting private candidates to take the examination should be discouraged.

(8) The system of compartmental examinations should be introduced at the final public examination.

(9) In place of numerical marking the system of symbolic marking be adopted. Five-point scale seems to be the best type of symbolic marking scale i.e., 'A' stands, for excellent. 'B' for good, 'C' for fair and average, 'D' for poor and 'E' for very poor.

(10) Examinations should be regarded as means and not ends. They should be conducted in such a manner that they become effective instruments of education. They should serve as stimulus to learn new facts, gain new experiences, discover weak points and estimate progress.

(11) Oral examinations should be held in addition to the written ones. Some qualities like candidate's alertness, intelligence, special interests, mental outlook, his personal qualities of mind and character and his mastery of acquired knowledge can be better tested by viva voce tests than by written examinations.

(12) An examination should have only one definite aim before it and that aim must be clearly known to the teacher and the examinee.

(13) A well-conducted examination should test both the actual attainment and capacity for future achievements. A combination of the traditional examination and carefully constructed intelligence test, therefore, supplies a more reliable means of selecting candidates for higher courses of study than the traditional examination alone.

Education Commission on Evaluation and Examinations

I. Evaluation at the Lower Primary Stage. The Education Commission 1964-66 stated, "One of the main purposes of evaluation at the primary stage is to help the pupils to improve their achievement in the basic skills and to develop the right habits and attitudes with reference to the objectives of primary education. These objectives and their implications for evaluation should be made clear to the teacher". The commission made the following suggestions :

The lower primary stage covering Classes I to IV should be treated as an ungraded unit, because this would help the children coming from different backgrounds to advance at their pace. As the

conditions in most primary schools, however, are not favourable to the general adoption of this procedure, it has recommended that the experiment should be tried out in the beginning in Class I and II, which should be regarded as a single ungraded unit. The two-year block may be divided into two groups, one for slow learners and the other for fast learners to enable different pupils to proceed at the level of their ability and move from one unit to another. Such a division, however, will be practicable only in a large-sized school with more than one section in each class.

Advantages Claimed. This will put an end to the existing practice of detentions in Class I and to the drop-outs and wastage resulting therefrom, and will also provide for continuity and flexibility in the educational programme of the first two classes. If the experiment regarding the ungraded unit succeeds in Classes I and II, it may be extended to the remaining classes of the lower primary stage.

Preparation of the Teachers. Teachers should be prepared for the ungraded system through the regular training courses and orientation programmes and should be helped with a supply of diagnostic tests and remedial material. The orientation may be given by the State Institutes of Education. Observation techniques, which are more reliable for assessing the pupil's growth at this stage than mere formal techniques of evaluation, should be used by teachers in a planned and systematic manner.

II. Evaluation at the Higher Primary Stage. Due importance should be given here also to oral tests, which should form a part of the internal assessment.

The teacher should be helped in such assessment with a rich supply of evaluation materials prepared by the State Evaluation Organisations, including standardised achievement tests.

Diagnostic testing is necessary here and indeed throughout the school stage. In most cases, such testing will be through simple teacher-made diagnostic tests.

Cumulative record cards play a vital role in indicating the growth and development of the pupil at each stage, his academic and emotional problems, and his difficulties of adjustment, if any, and the directions in which remedial action is to be taken to solve his problems or difficulties. In the first instance, the cards should be introduced from Class IV onwards to about 10 per cent of the selected schools as an experimental measure; but once the majority of teachers are trained in evaluating certain important aspects of the child's personality and the proper maintenance of the records, the use of the cards may be gradually extended to all the higher primary and, as a next step, even to lower primary schools.

III. Is a Primary External Examination Necessary? An external examination was necessary for (1) maintaining certain uniform standards at the end of the stage: (2) providing a basis for choice of

courses at the secondary stage; and (3) creating incentives for better teaching and learning. But all these arguments do not establish a case for an external examination of the formal type to be compulsorily taken by all the pupils in Class VII or VIII.

The Commission has advanced two arguments against external examinations :—

(1) It is not necessary or desirable to prescribe a rigidly uniform level of attainment for all the primary school pupils in a State or even a district, through an external examination.

(2) Instead of creating incentives for better teaching, the external examination intended for all will saddle teachers with standardised programmes and encourage the process for rote memorisation, which is the besetting evil of teaching and learning methods in our schools today.

Again, since full-time education at the lower secondary stage will provide, by and large, general education without any streaming, the argument regarding the choice of courses does not hold good; and for the diversion of pupils to full-time vocational courses to be made available at this stage, an examination which will test merely intellectual ability and academic attainment will not be of much help.

IV. Periodic Surveys of the Level of Achievement. While not in favour of a compulsory external examination, the Commission believes that for the proper maintenance of standards, periodic surveys of the level of achievement of primary schools is necessary. The Commission recommends that such surveys should be conducted by the district education authorities to assess the standard of performance in a given area by means of standardised or highly refined tests prepared by specialists in the State Evaluation Organisations.

Two Advantages Claimed. (1) This procedure will enable the education officers to pick out the weaker schools and help them to improve their performance.

(2) It will also assist the schools in finding out the weakness of their pupils for purposes of remedial work.

V. A Common Internal Examination for Inter-School Comparability. The Commission recommends that by making use of the standardised or refined test material referred to above, the district educational authorities may, if they so desire, arrange for common examination to be taken by the pupils of all the schools in a district at the end of the primary stage. Though the question papers will be set by the district educational authorities or by special paper-setters appointed by the State Evaluation Organisation, the performance of the pupils of each participating school will be done by the teachers of the school themselves, and not by any external examiners.

Advantages of Such a Common Examination. (1) As the question papers will contain standardised tests and highly refined and profes-

sional test items, the evaluation will be more valid and reliable than what is possible through the kind of annual and final examinations conducted in ordinary primary school.

(2) Through such common tests inter-school comparability with regard to levels of performance in the district can be obtained, and this would be helpful, as shown above, both to the education officers and to the schools.

Question Papers of Short Duration. Question papers in the different subjects at this common examination should be of short duration, each of not more than one hour or one hour and a half, so that the entire examination should be completed in two or three days.

This proposal aims at reforming the existing examination by making it less formal, reducing its burden on the pupils' minds, and increasing its validity as a measure of educational attainment. The certificate regarding the completion of the course should be given by the school and not by any external agency, and this certificate should be accompanied by a statement showing the results of the common final examination if any, together with the results of the internal assessment made by the school of the pupils' performance throughout the year, as shown in his cumulative records.

VI. Examinations for the Award of Scholarships. In addition to the common examination, the Commission recommends that special tests may be held at the end of the primary course for the award of scholarships or certificates of merit and for the purpose of identifying talent and pupils may appear for these tests on a voluntary basis. The evaluation of the pupil's performance in these tests will be done by external examiners.

VII. Improvement in External Examinations. (a) The technical competence of paper-setters should be raised through an intensive training programme sponsored by the State Boards ; (b) the question papers should be oriented to testing not merely the acquisition of knowledge but the ability to apply knowledge and the development of problem-solving abilities ; and (c) the nature of the questions asked should be improved.

(d) It is essential that scientific scoring procedures should be devised so that there may be optimum reliability in the assessment of the candidate's performance.

(e) With the ever-increasing number of students appearing for the Board examinations, the task of getting the answer scripts properly valued and processing the results efficiently within a given time is becoming more and more difficult. It is necessary that this process should be mechanised so as to make it more accurate and expeditious.

Large Incidence of Failure. The Commission observes, "the matter about which the public at large is most deeply concerned is

not the irrationality of the scoring procedures, or the inefficiency of the administrative processes, but the large incidence of failures in the external examination at the end of the school stage. An analysis of the results of the different Board examinations for the last five years shows that about 55 per cent of the candidates appearing for the high school examination and about 40 per cent of those appearing for the higher secondary school examination fail regularly every year. In the case of the private candidates the percentage soars up to 70 or even more. Failure often has a demoralising effect on the unsuccessful candidates. The failure of such large numbers of students, particularly after they have been screened year after year by means of annual and other school examinations, is a sad reflection on our methods of education as well as on our system of examination.

"We also believe, that with the proposed improvement in the curriculum, instructional materials and methods of teaching, and the reorientation in training of teachers, the incidence of examination failures will be reduced. But we do not think that a student should be branded as a total failure, if he passes in certain subjects but is unable to make the grade in others. There is no reason why he should carry with him the stigma of being declared as unsuccessful candidate if he has partially succeeded in his educational effort."

VIII. Certificates Given by the Board and the School. The Commission recommends that the certificate issued by the Board on the basis of the results of the external examination at the end of the lower or higher secondary stage, should give the candidate's performance only in those subjects in which he has passed, but there should be no remark to the effect that he has passed or failed in the whole examination. The Board, however, should issue a statement along with certificate showing his marks or grades in all the subjects. We further recommend that the candidate should be permitted to appear again, if he so desires, for the entire examination or for separate subjects in order to improve his performance.

On the completion of the course, at the end of the lower or higher secondary stage, the student should receive a certificate also from the school giving the record of his internal assessment as contained in his cumulative record card. This certificate may be attached to that given by the Board in connection with the external examination. But we are of the opinion that the external examination need not be compulsory for all the students of Class X or Class XI/XII. A student may choose to leave the school with the school certificate only without appearing for the external examination, and seek a job or even an entry into some vocational course on the basis of the certificate and the school records. It must be recognised, however, that since admission to institutions of higher secondary education as well as of higher education will be selective, the authorities controlling such institutions will lay down their own rules of eligibility for admission. A student seeking entry into these institutions may have not only to pass the external examination in

the subjects laid down and secure the prescribed grades but also submit himself, if necessary, to certain admission tests required by the institution.

In order to lessen the importance of the domination which the external examinations exercise over school education still further, the commission recommends that a few selected schools should be given the right of assessing their students themselves and holding their own final examination at the end of Class X, which will be regarded as equivalent to the external examination of the State Board of School Education. The State Board will issue certificates to the successful candidates of these schools on the recommendation of the schools. A committee set up by the State Board of School Education should develop carefully worked out criteria for the selection of such schools. For the success of this experiment it is essential that the schools should not only be freed from the requirements of an external examination but should be permitted to frame their own curricula, prescribe their own text-books, and conduct their educational activities without departmental restrictions.

This suggestion is indeed a bold one in the direction of freedom of educational experimentation and it carries certain responsibilities also. The Commission, therefore, suggests that right given to the experimental schools should be reviewed periodically as institutions invested with such powers should continuously earn their privilege. The Commission envisages that after the experiment is tried out successfully in a few schools, more and more schools will be released from the restrictive influence of the external examination and given the freedom to work out their own ideas in education.

IX. Methods of Internal Assessment. This internal assessment or evaluation conducted by individual schools is of great significance and should be given increasing importance. It should be comprehensive, evaluating all those aspects of the student's growth that are measured by the external examination and also those personality traits, interests and attitudes which cannot be assessed by it. Internal assessment should be built into the total educational programme of the school and should be used for improvement rather than for certifying the level of achievement of the student. It must be pointed out that all items of internal assessment need not follow quantified scoring procedures. Some of them may be assessed in descriptive terms and results should be kept separately and not combined artificially with other results to form aggregate scores."

The written examinations conducted in schools should be improved on the same lines as the external examination.

Methods Suggested by the Commission to Overcome the Shortcoming of Internal Assessment. (1) The results of the internal assessment and external examination should not be combined because the purposes and techniques of the two evaluations are different and because the results of the internal assessment of the different institutions

are not strictly comparable. The results of the external and internal assessment should, therefore, be shown separately in the certificate(s) given at the end of the course.

(2) It should be an important point in the inspections of schools to review the internal assessment made and to examine the correlation between the internal and external assessments. Persistence in over-assessment should be regarded as a weakness in the school programmes. It should be taken due note of while classifying the schools and should also be related to grants-in-aid so that institutions which tend to over-assess their students persistently would stand to lose in status and finance. The grants-in-aid rules should also authorize the Education Departments to withdraw recognition for persistent irresponsible assessment.

X. Evaluation Machinery. The comprehensive programme of evaluation that we have described in the preceding paragraphs requires for its implementation a well-organised machinery both at the State and the Central levels. The Secondary Boards of School Education that now conduct external examination at the secondary stage will be converted into State Boards of School Education with enhanced powers and functions. At the Centre will be the National Board of School Education that will be responsible for evaluation programme at the national level.

XI. No Compulsory External Examination. The external examination need not be compulsory for all the students of Classes X, XI or XII.

A student may choose to leave the school with the school certificate only without appearing for the external examination, and seek a job or even an entry into some vocational course on the basis of the certificate and the school records.

Admission to institutions of higher secondary education as well as of higher education will be selective, authorities controlling such institutions laying down their own rules of eligibility for admission.

XII. Establishment of Experimental Schools. A few selected schools should be given the right of assessing their students themselves and holding their own final examination at the end of Class X, which will be regarded as equivalent to the external examination of the State Board of School Education. The State Board will issue the certificates to the successful candidates of these schools on the recommendation of the schools. A committee set up by the State Board School Education should develop carefully worked out criteria for the selection of such schools. The schools should be permitted to frame their own curricula, prescribe their own text-books, and conduct their educational activities without Departmental restrictions.

Recommendations of the Report of the Committee on Examinations (1970)

Setting up of the Committee

The Central Advisory Board of Education, at its 35th meeting

held in 1970, expressed considerable concern about the conduct of public examinations held in the different parts of the country and passed the following Resolution :

"The Board requests the Chairman to set up a Committee on Examinations which will examine the present situation and make recommendations to counteract malpractices and to give protection to invigilators and others concerned with examinations."

Pursuant to the above Resolution, the Chairman of the Central Advisory Board of Education appointed a Committee for the purpose in 1970.

Chairman : Union Education Minister.

Vice-Chairman : Education Minister, Andhra Pradesh.

Members : Education Ministers, Bihar; Education Minister Assam ; Vijay Kumar Malhotra, Chief Executive Councillor Delhi; Shri A. E. T. Barrow, Prof. S. V. C. Ajya, Director N.C.E.R.T. (*Member-Secretary*).

New Concept of Evaluations

In a welfare State, children have to be educated according to their age, aptitudes and abilities. For this purpose, evaluation becomes a necessary tool in the educational process. In this way, it has a positive function. Whilst our present system of examinations attempts to assess scholastic attainments, it should nevertheless have also a predictive function to help pupils choose courses of study suited to their talent and potential, so that they may develop into useful citizens. Unfortunately, in our country, the negative function of an examination is emphasised more than its positive role, and the objective generally is to find out what a pupil is really unfit for, thus creating a fear and a failure complex. This over-emphasis on the negative aspect does incalculable harm to the whole educational process and leads to highly undesirable consequences...It may be mentioned here that world education opinion is against the practice of declaring a student as having 'failed' in a subject or in an examination.

Till about the year 1930, the entire process of an examination and the declaration of results were accepted without questions as unchallengeable and final. Further, the results of an examination were relied upon for a large number of purposes, including purposes for which they could never really be a correct index. There is now a change in the situation. Firstly, there is a growing tendency to think in terms of the specific purpose or purposes for which the result of an examination are intended. Secondly, there is a more critical appraisal of the examination system based on an accurate knowledge of the complexities of the educational process and of the human mind. It is this knowledge that has led to the conclusion that the confidence hitherto reposed in the results of an examination is not at all justified.

...The present incidence of malpractice, which naturally varies widely from State to State and even within the same State, is still not irredeemably high. What is disturbing, however, is the undeniable fact that the incidence is on the increase and, therefore, immediate effective remedial measures are urgent. In a way, it is only a corollary and a reflection of the crisis of character facing the entire world today. But this generalisation, comforting though it may sound, should not be taken as an alibi for those in charge of conducting the evaluatory process in our educational system. The stakes here are too high and the consequences too far reaching to admit of any competency or compromise. Malpractices at examination really amount to the initiation of a child into a dishonest way of life at a very early age. Educational qualifications acquired through malpractices can lead to total inefficiency of the nation, sapping its vitality and leaving a diseased body politics. It is, therefore, imperative that the educational process must be kept clean and inspiring. The young must be saved from early cynicism and unrepentant criminal propensities. This then is the real task.

Major Recommendations

A. Legislation

The State and Central Governments should immediately take suitable measures to get amending legislation passed in the relevant laws pertaining to the following matters :

- (a) Empowering the Board/University to grant autonomous status to well-established institutions.
- (b) Empowering the examining authorities to check students and prohibit those with weapons from entering the examination halls.
- (c) Making the assembly of persons within a certain distance from an examination hall a cognisable offence.
- (d) Making the indulgence in malpractices by employees and authorities of the universities/boards a cognisable offence.
- (e) Empowering the examining authorities to take out risk insurance for the invigilators and examiners.
- (f) Making the assault on an examiner or an invigilator or other person connected with examination, a cognisable offence.

B. Conduct of Examinations

(a) Paper-setters should be appointed at least six months prior to the commencement of a Public Examination and they should be given at least eight weeks to draft questions. The papers should be finalised at a meeting of the paper-setters.

(b) Where the number of candidates in a Public Examination is very large, there should be decentralisation with separate examination for each group of 10,000 school students or 1,000 college students.

(c) A Public Examination should be conducted in the institution in which the students study. The majority of the invigilators and superintendents should be drawn from the institution concerned.

(d) Admission to the centre of a Public Examination should be through one main entrance. Only *bona fide* candidates with identity cards should be admitted in the examination centre after thorough checking.

(e) Model answers should always be prepared and supplied by the paper-setters.

(f) Copies of the question-papers set should be made available to the teachers in the schools and colleges on the day of the examination but after it is over, so that the teachers could comment on the paper to the authorities quickly.

(g) The method of spot valuation at a central place to which all the examiners are called, should be adopted.

(h) The result should be declared subject-wise and furnished in the form of grades. The 'raw' marks given by the examiners should never be made available.

(i) Subject-wise passing should be introduced and the Public Examination certificate should be given on the candidates passing in the minimum number of subjects.

(j) The certificate issued by an examining authority should have two columns, *viz.*, one giving the result of Public Examination and the other giving the result of the internal assessment by the teachers.

(k) For the awarding of prizes and scholarships to a candidate who stands first in an examination or in a subject, a separate test should be conducted and admission to the same limited to those who secure the highest grade in the Public Examination.

(l) There should not be too many Public Examinations. There should be one at the end of the upper primary/middle school stage, another at the end of the secondary stage and the third at the first degree stage. All others should be internal assessments only.

C. Use of Examination Results

(a) Recruitment to the services should be made on the basis of tests/examinations conducted by the Public Service Commissions and the maximum age for appointment for clerical posts be reduced to 19 years.

(b) Admission to colleges including professional colleges should be on the basis of an entrance test conducted specifically for assessing the aptitude of a student for particular course. Eligibility to appear at these tests should alone be determined by the results of the Public Examination.

D. Budgeting for Education

In future, both the Central and State Governments should earmark funds separately for guidance and studies and research on examinations.

E. Research

There should be continued study and research on examinations, both at the State and Central levels and in the boards/universities in a co-ordinated manner. Necessary funds for the same should be provided on a priority basis.

F. Novel Ideas

Novel ideas for the organisation and conduct of Public Examinations should be encouraged.

Recent Reforms in the Method of Evaluation

Bhopal Seminar on Education. The matter of reforms in the examination system was taken up very seriously in 1956 when certain valuable suggestions were made at the Bhopal Seminar on Examination Reform. After this, services of Dr. Benjamin S. Bloom, a well-known authority on examinations from the University of Chicago, were secured to examine the problem and suggest measures for reform.

Setting up of Central Evaluation Unit. The establishment of the Central Evaluation Unit in 1958 was the first major step towards the implementation of a 10-year phased programme of examination reform which was approved by the Central Ministry of Education and got the concurrence of the State Education Departments. This was followed by the establishment of State Evaluation Units.

Action Plans for the State Evaluation Units. The Report of the Training Course on Evaluation outlined the programme under four heads, namely :—

- (i) Improvement in External Examination.
- (ii) Improvement in Internal Assessment and Home Examinations.
- (iii) Improvement in the methods and materials of teaching.
- (iv) Co-ordination of work with other agencies.

I. Improvement in External Examination. This implies :

1. Introduction of objective-based questions in Board Examinations on a phased programme.
2. Introduction of certain other changes such as improving scoring procedures, etc., on a phased programme.
3. Preparation of test material for Boards and schools.
4. Orientation of teachers to prepare pupils for improved pattern of external examination.
5. Orientation of examiners and paper setters in the techniques of educational evaluation.

6. Conducting study and research for the sound development of the programme of reform.

7. Preparation and publication of brochures and bulletins for teachers, examiners, paper-setters and administrators regarding the concept and techniques of evaluation and learning experience.

II. Improvement of Internal Assessment and Home examinations. This involves :

1. Development and standardisation of tests for internal assessment.

2. Development of the evaluation techniques and material on objectives which are not ordinarily assessable by external examination.

3. Intensive work with schools for trying out techniques of internal assessment.

4. Related study and research in connection with partial as well as total internal assessment and school evaluation.

5. Publication of necessary hand-books and brochures and standardised evaluation material for school use.

III. Improvement in Methods and Material of Teaching. For this purpose the Unit worked in close co-operation with Extension Services Departments and Training Colleges of the State to help develop learning experiences and programmes of suitable activities to attain desired objectives. Necessary literature was developed in the regional languages by the State Units in order to propagate the desired changes among teachers and other educators.

Changes in the curriculum and syllabi are being brought about in co-operation with Curriculum Committees and Subject Committees at the Department or Board-level.

In addition, production of good text-books oriented on the lines of objective-based approach to teaching has been taken up.

IV. Co-ordination of Work with other Agencies. This Unit worked with the following important agencies :

1. Co-ordination with the Central Evaluation Unit.

2. Co-ordination with State Evaluation Units.

3. Co-ordination with and cooperation of the teachers and colleges.

4. Co-ordination with State Boards.

General Functions to be Performed by the State Units. 1. Developing objective-based test material in various subjects for internal and external examination and also for the purpose of standardisation and research.

2. Helping the Secondary Examination Boards in their States in implementing the phased programme of examination reform.

3. Trying out the test material for analysis and improvement.
4. Standardising tests for internal assessment and research.
5. Undertaking a scientific study of the system of internal assessment and to determine procedures and methods of its incorporation in the school.
6. Helping schools in using standardised and other material in improving internal assessment.
7. Translating the test material obtained from the Central Evaluation Unit into their regional languages.
8. Producing and publishing literature pertaining to examination and related topics in regional languages.
9. Helping State Education Departments, training colleges and schools to modify curricula, instructional material and methodology of teaching in keeping with the proposed reform in examination.
10. Conducting studies and researches on problems specific to their States regarding evaluation.
11. Evaluating the impact of the changes in examination as they are effected to keep modifying the system periodically so as to make it most effective and efficient.

Secondary Education—A Review and Recent Developments

Meaning of Secondary Education. It is the second stage in the system of public education usually beginning with class 5 or 6 and ending in class 10 of a high school or 11 or 12 of a higher secondary school during which education is differentiated in varying degree according to the needs, interests, and aptitudes of the pupils.

Secondary Education (1854-1902). With the creation of the Department of Public Instructions in 1855-56, as a result of the Despatch of 1854, an era of rapid multiplication of secondary schools set in. The Despatch of 1854 had laid great stress on the system of grant-in-aid which encouraged the Indians to open secondary schools. The taste for English education increased rapidly. Indian Education Commission, 1882, recommended that secondary education should, as far as possible, be provided on the grant-in-aid basis and government should withdraw as early as possible from the direct management of secondary schools. The number of students was more than doubled in the twenty years between 1882 and 1902.

Secondary Education (1902-1921). This period witnessed an unprecedented expansion in secondary education which was achieved primarily through private Indian enterprise. Social and political awakening in the country also contributed to this expansion. The number of secondary schools rose to 7,530 with 11,06,803 pupils in 1921-22 as against 5,124 schools with 5,90,129 pupils in 1905. Attempts made at introducing vocational courses often became unpopular. The study of English became very popular. English was used as the medium at the high school stage.

Secondary Education (1921-1937). The number of recognised schools increased from 7,530 with 11,06,803 students in 1921-22 to 13,056 with 22,87,872 in students 1936-37. Modern Indian languages began to be adopted as medium of instruction

on a large scale. Greater attention came to be paid to the salaries and conditions of services of teachers in primary schools. The problem of providing vocational education at the secondary stage became very important and complicated.

Secondary Education (1937-1947). Expansion of secondary education fell short of the one seen in earlier periods. Mother-tongue became the medium of instruction at the secondary stage. The progress for the provision of vocational courses was slow. The number of training colleges for secondary teachers was considerably increased.

Secondary Education (after 1947). Secondary education in India is being considered to be the weakest stage in Indian education. The Secondary Education Commission appointed in 1952 under the chairmanship of Dr. A. L. Mudaliar submitted its report in 1953. An All India Council of Secondary Education was established in 1955 for evolving a programme of improvement. The National Council of Educational Research and Training was established as an autonomous body in September 1961 to develop programmes of high level research and training, and extension and improvement in school education. A crash programme for the improvement of science education was initiated in 1964-65. State evaluation units have been established in all the States except Madras and Nagaland for carrying out reforms in the examination and evaluation system. Bureaux of educational and vocational guidance have been established in almost all States. In order to improve the quality of text-books almost all the State governments have nationalised the production of text-books. As against 5·2 per cent of the population in the age-group 14-17 in 1950-51, the estimated figure was 17·8% in 1965-66.

Multipurpose School

The idea of multipurpose school was envisaged by the Secondary Education Commission (1952-53) appointed under the Chairmanship of Dr. Lakshmanswami Mudaliar in the context of educational reforms at the secondary stage. The Commission condemned the single track system of education and recommended that secondary schools should provide various diversified courses in accordance with the interests and aptitudes of the students. The scheme aims at removing all invidious distinction between the students preparing for technical and general courses of studies, breaking down the sense of inferiority that is associated with technology and manual labour, and making it possible to attain an educational system on truly democratic bases. The scheme of multipurpose schools was introduced in India in 1954. However, due to various reasons the scheme could not be implemented.

Education Commission (1964-66)

The Education Commission (1964-66) advocates the restriction of unplanned and uncontrolled expansion of secondary schools and

thinks that it will have to be provided in accordance with manpower estimates. In planning enrolments in secondary education two factors need to be kept in mind. Firstly, at the present rates of expansion the standards have deteriorated and educated unemployment has increased. Secondly, better standards of living and the desire for more education will further increase the pressure of expansion in future. At the lower secondary level use of testing and guidance should be made to enable a student to make his choice whether he would leave the school to take up a job or join a vocational course or continue general education. Beyond the lower secondary stage a system of selective admission should become essential. The Commission found it essential to vocationalise secondary education and to work towards a target wherein about 20 per cent of the enrolments at the lower secondary stage and about 50 per cent of those at the higher secondary stage would be in vocational education. Equalisation of opportunities in secondary education through the development of a large programme of scholarships and the discovery and development of talent were greatly emphasized. The pupils other than those who are diverted to vocational education will have a common curriculum of general education up to class X as there would be no 'streaming' of specialisation in the general course. This proposal is quite different from the scheme of multipurpose schools which was greatly stressed by the Secondary Education Commission and vigorously implemented in many States. The multipurpose schools required a diversification of courses after class VIII and yet most of such schools failed to provide a variety of courses to suit the different interests and aptitudes of students. The recent world trends in secondary education are in the direction of lengthening the period of general education and postponing diversification and specialisation to the upper stage of secondary education.

National Policy (1968)

The Resolution on National Policy on Education outlined the following principles in the field of secondary education :

- (a) Educational opportunity at the secondary (and higher) level is a major instrument of social change and transformation. Facilities for secondary education should accordingly be extended expeditiously to areas and classes which have been denied these in the past ;
- (b) There is need to increase facilities for technical and vocational education at this stage. Provision of facilities for secondary and vocational education should conform broadly to requirements of the developing economy and real employment opportunities. Such linkage is necessary to make technical and vocational education at the secondary stage effectively terminal. Facilities for technical and vocational education should be suitably diversified to cover a large number of fields such as agriculture, industry,

trade and commerce, medicine, and public health, home management, arts and crafts, secretarial training, etc."

Secondary Education in the Fourth Five-Year Plan

In the Fourth Five-Year Plan, the targets of secondary education in respect of age-group 14-17 (corresponding pupils in classes IX-XI) are set out below :

(Enrolment in Million)

	<i>1968-69 Enrolment</i>	<i>% of age-group</i>	<i>1973-74 (Target) Enrolment</i>	<i>% of age-group</i>
Boys	4.95	28.5	7.00	34.3
Girls	1.63	9.8	2.69	13.7
Total	6.58	19.3	9.69	24.2

Thus, it is expected to enrol 3.11 million additional pupils in classes IX-XI. The location of new schools will be determined according to the requirements of each area. The main efforts will be to enrich the content and improve the quality of secondary education. A few States have taken preliminary steps to adopt the new pattern of secondary education as recommended by the Education Commission. Regarding vocationalization of secondary education, the Plan envisages, the following measures :

"A major task in the field of post-elementary education is to provide a large variety of vocational courses for children who do not intend to continue their general education beyond the elementary stage. These courses have to be of varying durations, depending upon the trades and vocations proposed to be learnt. The industrial training institutes will meet a part of this demand. To prepare students to take up employment after the secondary stage, a number of vocational courses are being provided after class X in industrial training institutes, polytechnics, schools for nursing, and agricultural schools".

Recent Developments

Educational Television. A programme for large-scale introduction of educational television in India has been prepared for implementing during the Fourth Plan. It envisages the integration of television lessons with the normal class-room lessons. It would make full use of films, radio broadcasts and the expanded television coverage of the country both by terrestrial and satellite television broadcast. To implement the programme, an Educational Technology Unit is proposed to be set up in the NCERT. This unit will also

produce high quality teaching films. In this context, a request for foreign assistance has been made to UNDP. The assistance is estimated at \$ 778,700.

School Text-Books. Almost all the State Governments have nationalised the production of school text-books. At the national level NCERT is playing an effective role in bringing out model text-books, teachers' manuals and work books. A National Board of School Text-Books was set up in 1968 to co-ordinate and guide the activities of national and State-level organisations/institutions in the production of text-books. The Board, so far, has met twice, firstly in April 1969, and for the second time in May 1970.

Text-Books Printing Presses. The Federal Republic of Germany has offered 3 off-set printing presses for school text-books as gifts to India. These presses will be located in Bhubaneswar, Chandigarh and Mysore.

National Prize Competition for Children's Literature. In 1954-55, Government of India initiated a scheme for the award of prizes every year to authors of children's books/manuscripts of outstanding merit in all the modern languages of India. The 15th prize competition was organised during 1969-70. The author of each prize-winning book is awarded a prize of Rs. 1000, and the Government of India also purchases about 1,000 to 1,400 copies of the prize winning book.

Desh Geetanjali. It is a Central scheme formulated to strengthen the sense of National identity among school children. It will be implemented in two phases. The first phase will include (a) training teachers and selected students in the correct singing of the National Anthen ; (b) use of A.I.R. broadcasts for training school children in singing the National Anthem : and (c) the supply of record players and records of National Anthem to 500 schools. The second phase will consist of (a) collection and publication of existing songs that promote national integration ; (b) popularisation of popular tunes and songs such as '*Sare Jahan Se Accha*' and publishing songs in State languages; and (c) conducting competition in the correct singing of the National Anthem and award of prizes at State and National levels. The implementation of the first phase was taken up during 1970-71.

Adult and Social Education

Definitions of Literacy. A Meeting of Experts on Literacy held by UNESCO in 1962 recommended unanimously that the objective of 'functional literacy' should be defined as follows :—

"A person is literate when he has acquired the essential knowledge and skills which enable him to engage in all those activities in which literacy is required for effective functioning in his group and community, and whose attainments in reading, writing and arithmetic make it possible for him to continue to use these skills towards his own and the community's development."

"In quantitative terms the standard of attainment in functional literacy may be equated to the skills of reading, writing and arithmetic achieved after a set number of years of primary or elementary schooling."

The 1962 World Conference on Literacy and Society held in Rome took literacy to mean the fluent reading of ordinary newspapers or the equivalent of five years' ordinary schooling.

From the Philippines comes the following definition of literacy for good citizenship : "A good citizen should be able to read with understanding newspapers, bulletins, advertisements, tax notices and letters, and to write an ordinary letter."

This is the type of goal which is aimed at by most national literacy programmes, although it would be undesirable to give too much publicity to the objective of the citizen's ability to read tax notices.

Literacy Programmes, Adult Education, Social Education, Basic Education, Mass Education, Community Education, in a Wider Context. The mere attainment of literacy by an adult should not be a goal in itself. Adult literacy work cannot be seen in isolation and must lead on to continuing adult education. There

are various terms such as social education, basic (or fundamental) education, mass education, or community education which have been used to describe this wider process. It must be seen as a whole, right from the initial stages of literacy work up to work of a university level in an extramural or extension class.

Why Adult Education

The World Conference on Adult Education held in Montreal in 1960 describes the role of adult education in the following terms :

1. Preservation and Promotion of Culture. "The best in the traditional culture of each country should be preserved and enhanced and people should be encouraged to feel pride and dignity in their own cultural heritage. People must be encouraged to understand and promote change. Every man and woman should have opportunity for individual personal development, to the utmost of which he or she is capable, to become a mature and responsible person. In education man must be subject, not object".

2. Mutual Tolerance. Adult education is needed to promote international understanding, mutual sympathy and tolerance of different points of view and to put every adult in the way of arriving at the truth.

3. Development and Enrichment of an Individual. Through adult education, deficiencies in earlier formal education must be made good.

4. National Integration. It can also be a means of creating better understanding between divided groups in society, for example, between different generations.

5. Participation in Social Life. "Every adult must be able to equip himself or herself to play as full a part as he or she wishes to take social and civic life."

6. Development of Worthy Leisure Time Activities. Every adult should have the opportunity of discovering how he or she can most satisfactorily and recreatively use his or her leisure.

7. Adult Education for a Changing World. Second World Conference on Adult Education in 1960 observed : "Adult education alone can meet the needs of our situation here and now and it must be accepted as a normal and necessary part of the sum total of educational provision. That is its role in a changing world."

8. Adult Education as a Part of Total Educational Programme. The International Committee for the Advancement of Adult Education (1961) says : 'Adult education must be seen as a part of the total educational provision ranging from primary school to university. It would be a bad mistake to regard education as being divided into separate compartments'.

9. Adult Education and Vocational Efficiency. The same committee states : 'Adult education should enable everyone to study his

or her role as a parent and as a member of a community, as a wage earner and as a responsible citizen. It must also give opportunities for vocational employment.'

10. The Place of Literacy Work in National Efforts. The development of the modern world, the accession to independence of a large number of countries, the need for the real emancipation of peoples and for the increasingly active and productive participation, in the economic, social and political life of human society, of the hundreds of millions of illiterate adults still existing in the world, make it essential to change national education policies.

11. Adult Literacy and Economic Growth. Adult literacy, an essential element in overall development, must be closely linked to economic and social priorities and to present and future manpower needs.

12. Awakening in the People of an Appreciation of Five-Year Plans. One of the essential functions of social education is to awaken in the people an appreciation of the significance of the country's Five-Year Plans and to enthuse them for participation in it. This reflects the faith of the Indian people in democratic values, for in a democracy economic advancement must arise out of an educational effort. Social education will thus also ensure that people's cooperation in the Five-Year Plan will come from them not as individuals but as communities.

13. Benefits of New Knowledge. Since India has resolved to recover her place in technology in response to the demands of modern times, it is business of social education to serve as a smooth and effective channel between centres of research and the homes and hamlets in which the common people live. It aims to bring down to the people the benefits of new knowledge that is being continually created in laboratories and also the knowledge that is already there, but is not available to them.

14. A Knowledge of Basic Skills. The declared aim of all development plans in India is to raise the level of Indian humanity. This is achieved not only by the men and women of India achieving greater technological skill, but also by enlarging their minds. It is an important and traditional function of social education to bring this knowledge to the people; especially the knowledge which concerns them deeply e.g., knowledge of the basic essentials of a healthy life, civic education etc. As a large part of the Indian population is illiterate, literacy has become one of the most important programmes of social education and is an index of its progress.

15. Improvement in the Quality of Leadership and Followership. Men everywhere function in groups and a distinctive group is a cluster of men around a leader. The quality of a group is therefore largely a product of its leadership and if the Indian people have to justify their aspirations, this can be done only by improving

the quality of leadership in the villages and towns of India. This is a responsibility which social education alone can shoulder.

Social Education Programmes in India since Independence

The Central Advisory Board of Education at its meeting in 1948 expressed the view that organisation of adult education in India had become imperative as a result of the attainment of freedom. A committee was appointed to go into the question. Consequently in 1949, a new and comprehensive concept of adult education known as Social Education emerged. This concept included four elements of education (i) Democracy, (ii) Citizenship, (iii) Health, (iv) Education, for desirable social change. The contents of social education were broadened with a view to build up a comprehensive programme of education for life covering numerous helpful activities around the core activity of literacy.

International Seminar of South East Asian Countries. This was organised jointly by the Government of India and the Unesco at Mysore in November-December 1949. The subject for discussion was Adult Education for Community Action. The discussions proved helpful in formulating the programmes of social education in India. In the period from 1948 to 1951, several experiments in social education were tried. An Adult Education Caravan was formed in the Union Territory of Delhi. This caravan went from one group of villages to the other, for carrying out initial literacy and social education work. It was the primary school teacher in the village who continued the initial work, after the Caravan completed its visit.

A massive programme of social education was launched in the then State of Madhya Pradesh. The spearhead of that programme was the organisation of summer camps for social education every year with the help of teachers and student volunteers in about 500 villages. The Government of Bombay established regional committees for carrying out the programme of social education.

Social Education in the First Plan. In the First Plan, the Union Ministry of Education provided supporting services to the programme of social education by giving financial assistance to various schemes. Opening model community centres and developing selected primary schools into school-cum-community centres was one of such schemes. The other scheme related to the development of integrated library service and the improvement of rural library services. At the end of the First Plan, a scheme for the appointment of district social education officers to provide a link between the social education organisers in the development blocks and the Departments of Education of the State Governments and Union Territory Administration was also introduced. The Departments of Education continued social education and literacy work in such areas as were not covered by the community development programme.

Social Education in the Second Plan. In the Second Plan the Union Ministry of Education established the National Fundamental Education Centre, with assistance from Unesco and the Technical Cooperation Mission of the U.S.A. The objectives of the National Fundamental Education Centre are : to train key personnel of social education, such as the district social education organisers ; to carry out research ; to produce prototypes of audio visual aids and teaching material for social education and to act as a clearing house of information. The Union Ministry of Education introduced an additional scheme of workers' social education. A Workers' Social Education Institute was started at Indore. The other Central schemes taken up in the Second Plan period were the scheme for the production of literature for neo-literates, organisation of *Sahitya Shivirs* (literary workshops) for training authors in the techniques of writing for neo-literates, the establishing of the National Book Trust and the Institute of Library Science in the University of Delhi for providing facilities for training in public librarianship. Financial assistance was also extended to voluntary organisations in the field of social education.

Social Education in the Third Plan. In the Third Plan, the schemes started in the Second Plan were continued. It, however, came to light specially after the 1961 census that the adult literacy work had not made sufficient impact. Although there had been a rise in the percentage of literacy—from 16·6 per cent in 1951 to 24·0 per cent in 1961—it became evident that the number of adult illiterates had increased due to the growth of population. This made it necessary to plan for a massive programme for the eradication of illiteracy.

Education Commission on Adult Education

Liquidation of Illiteracy. The Commission stressed that every possible effort should be made to eradicate illiteracy from the country as early as possible and in no part of the country, however backward, it should take more than 20 years. The Commission urged that the national percentage of literacy should be raised to 60 per cent by 1971 and to 80 per cent by 1976.

Suggested Measures. As a first step to arrest the growth of illiteracy, following measures have been suggested :—

(a) Expansion of universal schooling of five years' duration to the age-group 6-11 ;

(b) Provision of part-time education to those children of age-group 11-14 who either miss schooling or drop prematurely out of school ; and

(c) Provision of part-time general and vocational education to the younger adults of the age-group 15-30.

Methods and Strategy of Social Education

Adoption of a Two-fold Strategy. For the liquidation of illiteracy

two-fold strategy comprising the selective approach and the mass approach has been recommended by the Commission.

1. Selective Approach. Under this approach programmes are to be adopted for specified group of adults which could be easily identified, controlled and motivated for intensive literacy work. It should be the responsibility of all employers in large farms and commercial, industrial, contracting and other concerns to make their employees functionally literate within a period of three years of their employment. If necessary a law may be enacted for this purpose. Big industrial plans in the public sector should take the lead immediately and set the pace in this important direction. Every development project should include, as an integral part, a plan for the education of its employees, more especially of those who are illiterate. Literacy programme should constitute an essential ingredient of all schemes launched by Government for economic and social developments.

2. Mass Approach. This approach postulates the mobilisation of all available educated men and women in the country for raising a force to combat illiteracy and utilise it in a well-planned literacy campaign. This will involve the teachers and students and all educational institutions. As a part of compulsory national service programme the student in the higher primary, secondary, higher secondary, vocational schools and those in the undergraduate classes of the universities and colleges should be required to teach the adults. Every educational institution should be given responsibility of liquidating literacy in specified areas.

3. Condensed Courses for Adult Women. With a view to promote literacy among women the condensed courses for adult women sponsored by the Central Social Welfare Board have been recommended by the Commission. The Commission also suggests that 'village sisters' should be encouraged for teaching women and organising adult education among local community.

4. Use of Mass Media of Communication. The Commission stressed the use of the mass media of communication as a powerful instrument for creating the climate and imparting knowledge and skills necessary for improving quality of work and standard of life.

5. Follow-up Programmes. Adequate follow-up including further education, the use of library, and the production of reading material is very essential for retaining the literacy achieved.

6. Continuing Education. The Commission recommends that educational institutions of all types and grades should be encouraged and helped to throw open their doors outside the regular working hours to provide such courses of instruction as they can to those who are desirous of receiving education. This implies the creation of a parallel part-time system of education which would provide adults with opportunities for taking the same diplomas and degrees as students in schools and colleges.

7. Ad-hoc Courses. The Commission suggests that the educational institutions should give the lead in organising *ad-hoc* courses which will help people to understand and solve their problems and to acquire wider knowledge and experience.

8. Correspondence Courses. Correspondence courses should be organised on a large-scale in order to bring education to those who are unable even to attend part-time courses.

9. Correspondence Courses for Teachers. These should be developed for the teachers in schools to keep them abreast with new knowledge as well as with new methods and techniques of teaching.

10. Establishment of a National Council of Home Studies. The Commission suggests that the Ministry of Education in collaboration with other Ministries should establish a National Council of Home Studies, for the purpose of accreditation and evaluation of agencies which provide correspondence courses, identification of the areas in which different types of correspondence courses would be of benefit, promote creation of such courses through proper agencies, and to conduct evaluation and research.

Opportunity to take examinations conducted by the Secondary Education Board and universities in the country should be made available to those who wish to work on their own without any assistance.

11. The Libraries. The Commission made two important observations :—

(i) School libraries should be integrated in the system of public libraries and be stocked with regarding material of appeal both to children and neo-literates.

(ii) The libraries should be dynamic and set out to educate and attract the adults to use them.

12. Role of Universities. The Commission feels that the universities in India should assume a much larger responsibility for educating the adults. They could undertake many programmes.

In order to have an efficient machinery for launching carefully planned adult education programmes, each university should establish a Board of Adult Education with representatives from all departments involved in adult education programmes. Universities should also set up Departments of Adult Education.

Universities should be financed and equipped for carrying out the adult education.

13. Organisation and Administration. The Commission recommends the establishment of a National Board of Education on which all relevant Ministries and agencies would be represented. Similar bodies should be set up at the State and district level.

Voluntary agencies working in the field of adult education should receive every encouragement, financial and technical.

Massive Drive for Adult Education and Recent Developments in Social Education

14-Point National Blue Print of Methods and Organisation as Suggested by the National Board of Adult Education. The National Board of Education constituted by the Government Resolution on 5th December, 1969, marks an important milestone in the history of Social Education. The first meeting of the National Board of Adult Education was held at Vigyan Bhavan, New Delhi, on May 4, 1970. Among those who attended were several Union Ministers of Education representatives of the State Governments, eminent adult educationists and number of eminent persons connected with adult education work in the country.

The Board adopted the following fourteen comprehensive resolutions on various aspects of the problem of adult education that may well be called a national blue print for a massive drive for the eradication of illiteracy :—

(1) **National Campaign for Literacy.** The Board recommended the organisation of a national campaign for literacy on a war footing and its follow-up, by programmes of publication of literature for the neo-literates, establishment of libraries, and organisation of continuing education for all the literate adults, including the neo-literates.

(2) **Adult Literacy Week.** The Board recommended that during the International Education Year, the country should observe an Adult Literacy Week that will help to stimulate national consciousness on the subject and mobilise national support for a mass campaign for the removal of adult illiteracy.

(3) **National Get Together.** The Board endorsed the chairman's suggestion for a national get-together for three days for the exchange of national and international experiences on adult literacy and adult education and the formulation of concrete programmes as also pilot projects for dealing with the different aspects of the problem and the special circumstances of different areas and different groups in the country.

(4) **Gram Shikshan Mohim Programme.** The Board appreciated the work done by the Maharashtra Government in the field of adult education and adult literacy through the programme of Gram Shikshan Mohim, and recommended that this pattern may be considered for adoption by other State Governments with local variations for the purposes of eradication of adult illiteracy. The Board suggested that State Governments may prepare concrete proposal in the field and take it up for implementation, to begin with, on pilot basis in selected areas.

(5) **Pilot Projects on Adult Education.** The Board welcomed the programme of pilot projects on adult education proposed to be launched in various parts of the country, both urban and rural, and the assistance proposed to be provided to State governments, uni-

versities and voluntary organisations by the Centre. The accent of the pilot projects will be on maximum public participation.

(6) Involvement of the Students in Literacy Programmes. The Board welcomed the action taken by the Education Ministry to include eradication of illiteracy among the items of the National Social Service Programme for college students and recommended that, in addition, for a determined and sustained campaign should be undertaken to involve the entire student population, collegiate as well as of senior school classes, in the proposed mass campaign for literacy. The Board appealed to the student community in India, in whose idealism and patriotism they have full faith, to respond to this appeal and join this campaign.

(7) Ministry of Education to give Priority. The Board recommended to the Ministry of Education and Youth Services that in the programmes which are being formulated for youth services, priority should be given to the eradication of illiteracy and the follow-up of adult education programmes.

(8) Participation of the Industrial Establishments. The Board recommended that industrial establishments, both in the public and private sectors, should give a lead in organising adult literacy and adult education programmes for their workers and thus help in industrial production. If necessary, legislation may have to be promoted for ensuring the fulfilment of this responsibility.

(9) Additional Radio Time. The Board welcomed the offer of the Minister of State for Information and Broadcasting to allot additional radio time for programmes of adult literacy.

(10) More Public Libraries and Literature. The Board recommended the speedy enactment, where this has not been done so far, of legislation for setting up of public libraries in cities, towns and large villages with emphasis on literature for the neo-literate, and supported by a central library and mobile libraries for serving rural areas.

(11) Training Programmes. The Board recognised the need for training programmes for those who will be undertaking the work of adult literacy and adult education and called upon universities, adult education associations and other concerned institutions to start such programmes.

(12) Utilising the Services of Voluntary Organisations. The Board recommended to the Ministry of Education and Youth Services that they should consider the possibility of utilising the services of the civil defence personnel, scouts and guides and other appropriate organisations in programmes of adult literacy and especially in the follow-up programmes.

(13) Expenditure on Adult Literacy Programmes. The Board expressed its conviction that without universalisation of literacy, the motivation and channel of communication for the promotion of programmes of family planning, agricultural production, etc., will not

be adequate and, therefore, suggested that expenditure on adult literacy and adult education relating to those programmes should be regarded as a national investment and a legitimate charge on the resources of these departments.

(14) **Setting up of Boards of Adult Education in States.** The Board recommended the setting up of boards of adult education in all the States and Union Territories that will include all the concerned government departments as also the voluntary agencies in the field.

National Seminar on Adult Education

A national seminar was held in September 1970, on the theme, 'Adult Education in the Seventies', as part of the programmes for the International Education Year 1970. It discussed 9 different aspects of adult education covering international experiences, functional literacy programmes, literacy services, role of universities and voluntary organisations, etc. The International Literacy Day was observed on 8th September 1970, as in earlier years, but with a difference. The Ministry provided a detailed work-plan specially recommending that the country should observe an Adult Literacy Week (8 to 14 September) that would help to stimulate national consciousness on the subject and mobilise national support for a mass campaign for the removal of adult literacy.

Kisan Saksharta Yojana. (Farmers' Training and Functional Literacy Project) is jointly operated by three Union Ministries, viz., Food and Agriculture, Education and Youth Services and Information and Broadcasting. The functional literacy programme, one of the components of the project, is included in the Fourth Plan with an allocation of Rs. 2 crore. During the Plan period it is proposed to cover 100 districts in the country, synchronising with coverage of 100 high-yielding varieties programme districts. It is proposed to cover 60 districts by 1970-71. A scheme of pilot projects, as recommended by the National Board of Adult Education, has been prepared which visualises complete eradication of illiteracy in about 10% of the districts in India covering about 10 million illiterate adults in the first phase during the Fourth Plan.

Literacy in India (1961-1971)¹

According to the Census of 1971 a person is deemed literate if he can both read and write with understanding in any language. A person who can merely read but cannot write is not a literate.

Provisional Population Totals Table gives the extent of literacy in India and of each State and Union Territory. Taking the country as a whole, 29·35 per cent of the population is literate. This compares-

1. Source : Census of India 1971, Paper I of 1971, Provisional Population Totals, Registrar General & Census Commissioner, India.

favourably with literacy rate recorded in 1961, which was 24·03 per cent. However, the rise in literacy rate is not striking. More than 70 per cent of the population is still illiterate.

It may be observed that Chandigarh, which was second in 1961, has now moved to the first rank and Kerala, which was third in 1961, has now taken the second rank. Delhi, which topped the list in 1961, has now relegated itself to the third rank. Goa has moved up from the seventh rank in 1961 to fourth rank in 1971. It is creditable, that the Union Territory of Laccadive, Minicoy and Amindivi Islands which was very low in 1961, occupying the fifteenth rank, now takes the Sixth rank. The States, Union Territories and other areas which were fairly low in the ranking in 1961 and continued to be so in 1971, are North-East Frontier Agency, Dadra and Nagar Haveli, Jammu & Kashmir, Rajasthan, Bihar, Uttar Pradesh, Madhya Pradesh and Andhra Pradesh. Orissa has slipped down from the sixteenth rank in 1961 to twenty-first rank in 1971.

Efforts are being made in the various States and Union Territories to bring up the level of literacy rate in some of the backward regions in order that they may catch up with the others. From this point of view, Jammu and Kashmir and Dadra and Nagar Haveli and to a considerable extent, North-East Frontier Agency, whose literacy rates are low, have made an admirable effort in increasing their literacy rates in the last decade. It would appear to be the result of such a drive that the Laccadive, Minicoy and Amindivi Islands, with a rate of increase of literacy of 87 per cent in the last decade, has jumped up from the fifteenth position to sixth in 1971. The other areas that seem to have made commendable effort to increase the literacy rate are Goa, Daman and Diu, Maharashtra, Himachal Pradesh, Tripura, Meghalaya, Nagaland and Haryana. At the same time, it is regrettable that the efforts appear to be lagging far behind requirements in State like Assam, which has the doubtful distinction of showing a fall in literacy rate in 1971, as compared to 1961. Bihar shows a mere increase rate of 8·5 per cent, Manipur only 8 per cent, Andhra Pradesh 15·9 per cent. For some reason, Delhi also seems to show signs of some stagnation in general literacy. The rate of increase of literacy has only been 7·39 per cent, though the overall literacy rate of Delhi's population exceeds 50 per cent, its complacency seems to have led to its slipping in ranking to third place in the last ten years.

Taking the country as a whole the female literacy is 18·47 per cent as against the general literacy of 29·35 per cent. In 1961, the female literacy rate was 12·95 per cent.

Census of India 1971—Provisional Population Totals

Figures of Literacy

A. Population of India	Total	54,69,55,945
	Males	28,30,55,887
	Females	26,38,99,958

be adequate and, therefore, suggested that expenditure on adult literacy and adult education relating to those programmes should be regarded as a national investment and a legitimate charge on the resources of these departments.

(14) **Setting up of Boards of Adult Education in States.** The Board recommended the setting up of boards of adult education in all the States and Union Territories that will include all the concerned government departments as also the voluntary agencies in the field.

National Seminar on Adult Education

A national seminar was held in September 1970, on the theme, 'Adult Education in the Seventies', as part of the programmes for the International Education Year 1970. It discussed 9 different aspects of adult education covering international experiences, functional literacy programmes, literacy services, role of universities and voluntary organisations, etc. The International Literacy Day was observed on 8th September 1970, as in earlier years, but with a difference. The Ministry provided a detailed work-plan specially recommending that the country should observe an Adult Literacy Week (8 to 14 September) that would help to stimulate national consciousness on the subject and mobilise national support for a mass campaign for the removal of adult literacy.

Kisan Saksharta Yojana. (Farmers' Training and Functional Literacy Project) is jointly operated by three Union Ministries, viz., Food and Agriculture, Education and Youth Services and Information and Broadcasting. The functional literacy programme, one of the components of the project, is included in the Fourth Plan with an allocation of Rs. 2 crore. During the Plan period it is proposed to cover 100 districts in the country, synchronising with coverage of 100 high-yielding varieties programme districts. It is proposed to cover 60 districts by 1970-71. A scheme of pilot projects, as recommended by the National Board of Adult Education, has been prepared which visualises complete eradication of illiteracy in about 10% of the districts in India covering about 10 million illiterate adults in the first phase during the Fourth Plan.

Literacy in India (1961-1971)¹

According to the Census of 1971 a person is deemed literate if he can both read and write with understanding in any language. A person who can merely read but cannot write is not a literate.

Provisional Population Totals Table gives the extent of literacy in India and of each State and Union Territory. Taking the country as a whole, 29·35 per cent of the population is literate. This compares

1. Source : Census of India 1971, Paper I of 1971, Provisional Population Totals, Registrar General & Census Commissioner, India.

favourably with literacy rate recorded in 1961, which was 24.03 per cent. However, the rise in literacy rate is not striking. More than 70 per cent of the population is still illiterate.

It may be observed that Chandigarh, which was second in 1961, has now moved to the first rank and Kerala, which was third in 1961, has now taken the second rank. Delhi, which topped the list in 1961, has now relegated itself to the third rank. Goa has moved up from the seventh rank in 1961 to fourth rank in 1971. It is creditable, that the Union Territory of Laccadive, Minicoy and Amindivi Islands which was very low in 1961, occupying the fifteenth rank, now takes the Sixth rank. The States, Union Territories and other areas which were fairly low in the ranking in 1961 and continued to be so in 1971, are North-East Frontier Agency, Dadra and Nagar Haveli, Jammu & Kashmir, Rajasthan, Bihar, Uttar Pradesh, Madhya Pradesh and Andhra Pradesh. Orissa has slipped down from the sixteenth rank in 1961 to twenty-first rank in 1971.

Efforts are being made in the various States and Union Territories to bring up the level of literacy rate in some of the backward regions in order that they may catch up with the others. From this point of view, Jammu and Kashmir and Dadra and Nagar Haveli and to a considerable extent, North-East Frontier Agency, whose literacy rates are low, have made an admirable effort in increasing their literacy rates in the last decade. It would appear to be the result of such a drive that the Laccadive, Minicoy and Amindivi Islands, with a rate of increase of literacy of 87 per cent in the last decade, has jumped up from the fifteenth position to sixth in 1971. The other areas that seem to have made commendable effort to increase the literacy rate are Goa, Daman and Diu, Maharashtra, Himachal Pradesh, Tripura, Meghalaya, Nagaland and Haryana. At the same time, it is regrettable that the efforts appear to be lagging far behind requirements in State like Assam, which has the doubtful distinction of showing a fall in literacy rate in 1971, as compared to 1961. Bihar shows a mere increase rate of 8.5 per cent, Manipur only 8 per cent, Andhra Pradesh 15.9 per cent. For some reason, Delhi also seems to show signs of some stagnation in general literacy. The rate of increase of literacy has only been 7.39 per cent, though the overall literacy rate of Delhi's population exceeds 50 per cent, its complacency seems to have led to its slipping in ranking to third place in the last ten years.

Taking the country as a whole the female literacy is 18.47 per cent as against the general literacy of 29.35 per cent. In 1961, the female literacy rate was 12.95 per cent.

Census of India 1971—Provisional Population Totals

Figures of Literacy

A. Population of India	Total	54,69,55,945
	Males	28,30,55,887
	Females	26,38,99,958

B.	Decennial Population Growth Rate 1961-71	24·57 per cent	
C.	Density of Population	182 per sq. km.	
D.	Sex Ratio	932 females per 1,000 males.	
E.	Literacy Rate	Total Males Females	29·35 per cent 39·49 per cent 18·47 per cent

	<i>Population</i>	<i>Percentage of Literacy</i>
India	54,69,55,945	29·35
States :		
Andhra Pradesh	4,33,94,951	24·56
Assam	1,41,57,314	28·74
Bihar	5,63,87,296	19·97
Gujarat	2,66,60,929	35·70
Haryana	99,71,165	26·69
Himachal Pradesh	34,24,332	31·32
Jammu & Kashmir	46,15,176	18·30
Kerala	2,12,80,397	60·16
Madhya Pradesh	4,14,49,729	22·03
Maharashtra	5,02,95,081	39·06
Meghalaya	9,83,336	28·41
Mysore	2,92,24,046	31·47
Nagaland	5,15,591	27·33
Orissa	2,19,34,827	26·12
Punjab	1,34,72,972	38·39
Rajasthan	2,57,24,142	18·79
Tamil Nadu	4,11,03,125	39·39
Uttar Pradesh	8,82,99,453	21·64
West Bengal	4,44,40,095	33·05
Union Territories & Other Areas :		
Andaman & Nicobar Islands	1,15,090	43·48
Chandigarh	2,56,727	61·25
Dadra & Nagar Haveli	74,165	14·86
Delhi	40,44,338	56·65
Goa, Daman & Diu	8,57,180	44·53
Laccadive, Minicoy & Amindivi Islands	31,798	43·44
Manipur	10,69,555	32·80
North-East Frontier Agency	4,44,744	9·34
Pondicherry	4,71,347	43·36
Tripura	15,56,822	30·87

Standard of Literacy. The Thirty-first Meeting of the Central Advisory Board of Education, 1964 approved the following standard :—

Stage I

- (a) Sight recognition of about 250 words.
- (b) 90 per cent comprehension of a piece of writing within this vocabulary range.
- (c) Ability to read simple charts and posters displayed in the area.
- (d) Acquaintance with the forms in frequent use in the lives of individuals, for example, money order forms, etc.
- (e) Ability to write simple sentences and most often used names.

'Post-Literacy Work'. Post-literacy work has two aspects. The first is directed towards prevention of relapse into illiteracy. It will be found that many of the learners will not be keen to attempt a further stage of literacy. However, effort is required to prevent their forgetting whatever they have learnt. Many ways have been tried. The simplest is to write on whatever wall space available in the village, simple sayings, slogans and verses composed by saints. Numerals from 1 to 100 and the alphabet may also be written. This keeps the letters before the eye of the villager. Distribution of unstamped postcards has also been successfully tried. Reading and writing groups can be formed with a view to give practice in reading and writing. They should meet once a week to have practice in reading and writing. Simple reading material like wall newspaper and small pamphlets has to be provided. If a printed wall newspaper can be had, it serves well but in the absence of one, writing of news in bold letters on a board or on a wall space can serve the same purpose. The effort to prevent relapse into illiteracy in this manner helps in advancing knowledge also.

Regular post-literacy classes (second stage of literacy) can also be tried. These will be for those adults who have attained the standard of first stage and are desirous to learn further. Reading material of an advanced type can be used in these classes. Improvement of ability of writing should be aimed at. The standard aimed at in these post-literacy classes should as far as reading and writing ability is concerned, be that of second primary stage. Standard in arithmetic should cover ability to write farm accounts, calculation of interest, working out profit and loss, etc.

The following minimum standard in literacy is suggested :—

Stage II

- (a) Sight recognition of about 2,000 words.
- (b) Ability to analyse and explain in own words the contents of a composition of about two pages (700 words).

- (c) Ability to write letters and applications most often needed in the life of an individual.

Literacy as a Part of the Continuing Education of Adults. Obviously, literacy education should be seen as the first step within a broader programme of the continuing education of adults. This concept has been repeatedly emphasised and reaffirmed at international conferences, among them the World Conference on adult Education held in Montreal in 1960, the World Conference on Literacy and Society held in Rome in 1962, and the Regional Conference on the Planning and Organisation of Literacy Programmes in Africa held in Abidjan in 1964.

It was stressed in the outline plan for African educational development, adopted by the Conference of African States held in Addis Ababa in 1961, that adult education programmes must go beyond the teaching of reading and writing and numbers. For persons with little formal schooling, such programmes must provide a continuing education related to the activities of adults in their everyday lives. They must also promote a progressive understanding of the great social and technical changes taking place in Africa.

Non-Governmental Organisations. There are many non-Governmental organisations who have played a significant role in helping the spread of social education.

The Indian Adult Education Association, New Delhi, has organised, since 1950, annual national seminars on subjects relating to social education.

The Bombay City Social Education Committee has been doing significant work for adults in the metropolitan area of Bombay.

The Mysore State Adult Education Council has been in the field for many years and has been regularly carrying out literacy work and has also taken a lead in establishing *vidyapeeths*.

There are other voluntary organisations also who are contributing their share in the cause of social education.

Several Causes of Reluctance. The 1962 World Conference on Literacy and Society held in Rome distinguished the major causes of reluctance in adults towards coming to literacy classes as follows :—

(a) The environment of the illiterate adult does not seem to him to require literacy in order to bring immediate changes in the standard of living.

(b) The problem of earning a living is so acute that the adult does not have sufficient time or energy to come to the class.

(c) The adult illiterate often feels that it is too late to learn to read and write anywhere.

(d) The individual going to class may find himself in the minority and accordingly an object of suspicion by the majority.

(e) Social customs and traditions may make such demands upon the time of the adult that he is unable to attend classes regularly.

Incentives for Attending Literacy Classes

A Manual of Adult and Youth Education published by UNESCO in 1966 lists the following incentives for attendance by adults at literacy classes :—

1. Status ; the development of religious and civic consciousness, and the social advantage of being able to participate directly in local government after becoming literate and to co-operate actively with leading citizens.
2. Compulsory primary education schemes which have the dual advantage of reducing the incidence of illiteracy and of stimulating parents to keep up with their children.
3. Competition among villages.
4. Evidence of proficiency—trophies, badges and certificates.
5. Free tuition, and free or very low-priced books and materials and household articles for those attending literacy classes; distribution of agricultural materials—including seed.
6. Publicity for those who have successfully completed literacy courses.
7. Better prospects of employment—sometimes priority consideration for jobs ; higher wages.
8. The desire to write letters—especially for persons employed away from home.
9. The application of sanctions on illiterates, e.g., prohibition to attend public entertainments ; legal prosecution of people neglecting regular attendance at literacy courses (only two countries mentioned these negative incentives).
10. The intrinsic desire to be able to read and write.

Suggestions for Acceleration of the Programme of Social Education with Literacy as its Core Activity

Much of the failure of social education and literacy can be attributed to the fact that the responsibility for carrying out the programme is not entirely with the Central Ministry of Education. Social education and literacy being essentially an educational activity linked up with general education as a whole, it is evident the Central Ministry of Education and the Departments of Education of the State Governments and Union Territories should have the complete responsibility for social education and adult literacy work.

- (i) It is expected that in the near future the age group 6-11 will be in primary schools. Since the adult age-group, properly so

named, is 14-45, the question would arise what is done with the age-group 11-14, which is children-cum-adolescent age-group. There will be two types of persons in this age-group, those who have been in the primary schools for some years and those who have never attended any school. It is suggested that primary schools should run part-time classes for this group at suitable time for two hours a day at least on three or four days in a week. This work should be taken up by the primary schools as a part of their regular programme.

(ii) The next group would be the age-group 14-45. Within this age-group, wherever possible, there should be concentration on the youth group which may be regarded as the age-group 14-45. Several approaches can be tried for making this 14-45 age-group literate. These are mentioned below :—

(a) Regular literacy classes for men and women of five months' duration may be conducted. These classes should be conducted at suitable time at least for $1\frac{1}{2}$ hours on every week day. The teacher should be trained in adult literacy methods and the classes should be provided with seating accommodation, lighting, teaching and learning aids.

(b) Another approach could be the 'neighbourhood group approach'. Experience shows that many adult persons, though they are interested in becoming literate, find it difficult to come regularly to a literacy class. A neighbourhood group of such adult illiterates could be formed and a teacher can be sent to that group at a time which is convenient to them.

(c) The Home Class is specially important for making women literate. Women find it difficult to leave their homes. Classes for small groups of women can be held by suitable volunteer teachers or educated persons from their own families.

(d) Campaigns for liquidation of illiteracy can also be undertaken almost everywhere in the country. One of the drawbacks of such campaigns is that they cannot be of a longer duration than four to six weeks. Such campaigns can be arranged mostly on voluntary basis like the Gram Shikshan Mohim of the Government of Maharashtra and a similar one in the Dharwar District of Mysore State. The basic pattern of such campaigns can be adopted with suitable modification in other States and Centrally administered areas. Students and teachers can be requested to volunteer for this type of work and the Panchayati Raj institutions could be requested to mobilise the illiterate adults and to provide the necessary facilities. It is, however, to be borne in mind that such campaigns yield results only if there is efficient guidance and supervision. The main purpose of such campaigns is to create an atmosphere for motivating the illiterate population to become literate. The effort has to be followed up by regular literacy work.

(c) Another approach could be to ask the teacher training institutes to take up literacy work in and around the areas where they are located. The advantage of this type of approach is that the teacher gets an experience of literacy work also.

(f) Yet another approach could be to encourage voluntary organisations to take up this work. The necessary financial assistance should be given to such voluntary agencies.

If the benefits of literacy are to survive, it is absolutely necessary that adequate measures should be taken to provide facilities for the use of the newly acquired skills of reading and writing. Literature for the neo-literates and the new reading public has, therefore, to be produced on large scale and public libraries and rural library services have to be provided.

The success of the social education programme with literacy as its core activity, necessitates that there should be adequate administrative and supervisory personnel. This has to be built up and trained.

Functional Literacy Programmes of Adult Education and Agricultural, Industrial and Overall Development of the Country

Functional Literacy Programmes have Two Main Aspects

1. To quote the Teheran report, "Rather than an end in itself, literacy should be regarded as a way of preparing man for a social, civic and economic role that goes far beyond the limits of rudimentary literacy training consisting merely in the teaching of reading and writing."

2. Secondly, again to quote the Teheran report, "Literacy teaching should be resolutely oriented towards development, and should be an integral part not only of any national education plans but also of plans and projects for development in all sectors of the national life." This means that literacy programmes should be linked to all development plans of the country, whether these be economic, social, political or cultural in character.

In view of the low standard of living in most Asian countries, the primary emphasis must be placed on economic development. The general case for literacy training as an aid to economic development has already been put many times. A literate person has greater access to knowledge, which will assist his personal improvement, than an illiterate one. From a national point of view "the existence of a substantial proportion of illiterate adults in the manpower potential of a given country can be a bottleneck in its development."

It has been shown that there is a correlation between economic development and rising literacy. Bowman and Anderson established a correlation between high literacy rates (over 90%) and high per

capita income (over \$ 500 per annum) and between low literacy (less than 30%) and low per capita income (less than \$ 200). In a study of societies in the Middle East, Daniel Lerner has shown that literacy has a close correlation with the modernisation of society.

Agricultural Development—Green Revolution and Adult Education

Improvement of agricultural production is the most pressing need in Asia, since in most countries, it contributes over 50% of gross national product and employs more than 70% of the total labour force. There has, unfortunately, been a tendency for agricultural production to lag in this decade, and the 5% per annum increase which is the target for the Development Decade has not been released. Food production has not even kept pace with population increase. This stagnation has had a detrimental effect upon the development of industry in several ways. It leaves industry short of raw materials and because agriculture is not providing the necessary export, the amount of foreign exchange which is available for the import of capital goods and the industrial raw materials is reduced.

Adult education, of course, is not the panacea for all agricultural problems, as the increased use of fertilizers, more and better use of machinery, more efficient irrigation schemes and so forth are of extreme importance. But in order that agricultural production should be increased, both in the short and in the long run, there is a need for an educated rural population.

Industrial Development and Adult Education

Although agriculture is, at the moment, most important sector in all Asian economies, no rapid increase of gross national product will be made until and unless there is a considerable growth of industry. Such growth will not be slow, smooth and painless. An industrial economy is more dynamic and subject to change than an agricultural one. This will be particularly so in Asia, where industry must not only complement the agricultural sector of society, but must also be able to adapt itself to changing conditions, forced upon it by the international market and the rapidly changing needs of developing societies.

Population Control and Adult Education

Over and above the problems of agriculture and industrial production, and related to them, the problem of population is the most pressing one which is facing the Asian countries. This is a very difficult one to deal with because there are many social, religious and political issues involved, and the arguments for population control in one country might not be accepted in others. But where governments do accept the need for some form of population control, then there is need for education in the reasons for and the methods of such control. This education should be given not only amongst the women and the girls, but also amongst the population in general in

order to change attitudes towards large families. This education should be linked with the establishment and acceptance of clinics and advisory centres. Experience in Japan shows that a determined effort can keep population increase in check, and a programme of functional literacy could assist birth control programmes in other Asian countries.

Social Development

Other schemes of social development, some of which are necessitated by economic development, can be assisted by adult education programmes. Among these are schemes for rural development, urban schemes for migrants, housing, health control and nutritional education projects.

Schemes of rural development are necessary in order to make the countryside more economically productive and more socially acceptable, and thus regulate the migration of rural population to the towns. To achieve this, it is necessary to stimulate local energy and voluntary activity.

A Study in the Maharashtra State, throws some light on the need for rural development. The study contains a report of a research worker who stated that in the course of numerous interviews in three North Satara villages, "The overwhelming majority of respondents said that it was only the economic need that sent them to cities to earn money. Nobody wanted to go to the industrial town, but for many people the village did not provide a livelihood." One should not generalise too much but it points to the necessity of linking literacy programmes to schemes of rural development, if literacy is not to accentuate the uncontrolled drift to the towns.

Cultural Development and Adult Education

Mention should also be made of the use of functional literacy programmes for both cultural and political objectives. Economic development is not an end in itself, but should be a means towards the "good life". In this "good life", non-economic factors play an important role and should be understood. It is necessary to ensure that those elements of traditional culture which are worthy of retention are not destroyed. And the emotional significance of even those elements which are considered obsolete or progress-retarding must be understood, if some substitute for them in the psychological make-up of the people is considered to be necessary.

Political Development and Adult Education

Functional literacy should also be linked to political development. If planning is to be democratic, there should be the widest possible understanding of the plans. Functional literacy should not simply be a means of providing a downward channel of communication, but should be part of a process of democratic discussion. The essence of democratic planning was stated by Mr. Nehru when he

said "Obviously, it is necessary to plan, to direct, to organise and to co-ordinate, but it is even more necessary to create conditions where spontaneous growth from below is possible and can take place."

In considering the strategy of literacy planning, therefore, the planners should be as cognisant as possible of the many threads of economic, social, political and cultural development, and of the way in which literacy can be woven into them. Literacy programmes should be regarded as one factor in development, contributing to, and at the same time being affected by the other factors. It is a complicated process, and one which hitherto has not received the attention which it deserves. If literacy is to be effective, planning in this field is as essential as in all other fields of development.

Utilisation of Different Means, Methods, Structures and Techniques

New Techniques. The disproportion between the immensity of the task to be accomplished and the limited material and human resources of the developing countries, and the introduction of new elements in literacy policy, including the transition from rudimentary to functional literacy and the diversification of literacy programmes, call for new solutions to the problems involved in the training of instructors and the selection of techniques and in the educational infrastructure needed to overcome illiteracy.

Personnel Needed. The new concept of functional literacy makes it necessary to reconsider the question of the personnel needed to carry out programmes. To ensure the full mobilisation of resources, the teachers must be supplemented not only by specialised instructors, or, if they are not available, by specially trained voluntary workers, but also by the members of all the groups that make up the educated sector of the national community.

Forms of Literacy Programmes. Functional literacy depends for its success upon an appropriate infrastructure, on-the-job educational facilities, out-of-school facilities in the villages and towns, and so on. It also presupposes the use of schools as literacy centres and the creation of a number of services specialised in research and in the preparation of teaching and reading material and publications. The literacy programmes should be considerably enlarged and the duration of teaching extended accordingly.

Programmes Suited to Adult Psychology. To be effective, literacy work demands programmes sufficiently diverse in form and content to take account of differences in age, sex, condition, environment, the field of interest of the adults concerned, their motives and immediate employment openings. This diversity presupposes research into the psychological and social characteristics of the different categories. In addition, the existence of many linguistic groups and the determination of many governments to provide literacy training (and adult education) in the mother tongue of the people concerned will

probably involve special linguistic studies and the transcription of non-written languages.

The elaboration of teaching methods adapted to the mental habits of adults, to the psychology and way of life of the different social and occupational groups and to the actual content of this new teaching constitutes one of the major tasks of modern pedagogical science. Literacy and adult education techniques, reading materials and the texts used need greater diversification so that they can be adapted to the differing needs of each society.

Judicious Combination of Traditional and Modern Techniques. The need to carry out an immense task within a short period demands that traditional techniques be judiciously combined with the most modern ones. The lack of qualified teachers, the need to reach millions of illiterates scattered over vast territories, and the power and attraction of sound and image speak in favour of using non-conventional means of communication and modern techniques, e.g., radio, television, films, the press, including pictorial newspapers and certain forms of programmed instruction. Indeed, their utilisation will add a new dimension to adult education. But the massive use of such media to create suitable motivations for learning and provide education, in areas having a high proportion of illiterates, will require experiment and a very careful evaluation of its results.

Adult Education Projects and Economic Development— Green Revolution

In Iran the project consists of two separate four-year experiments, one in an oil-producing region in Khuzistan recently selected as a pilot area for economic development, the second among industrial workers in the ancient but now rapidly expanding city of Isfahan.

An other project is being carried out in Mali, a predominantly rural country with an 80 per cent adult illiteracy rate. It will comprise two five-year experiments, the first concerning 100,000 agricultural workers in the region of Segou, and the second to affect three-quarters of the 8,500 illiterate workers employed in about twenty State-controlled enterprises in the industrial zone of Bamako.

In Ecuador a five-year literacy project is to be carried out in three different zones and forms part of a ten-year development plan. The overall objective for the project is to give literacy training or basic education to some 40,000 adults in 1,270 centres.

In Tanzania, the pilot project is to be integrated with the five-year development plan launched in 1964, and located in a priority development zone south of Lake Victoria. The region is primarily agricultural, but the national plan provides for a certain amount of mechanisation and industrialisation. The project, which will be

carried out with the participation of cooperatives and trade unions, is expected to affect the lives of between 200,000 and 300,000 people.

Provision is made in each of these projects for the evaluation of results, and the direct and indirect contributions of literacy to development will be assessed. The lessons learned will eventually be applied to the problems of other areas. The long-term aim is to establish methods and mobilise support for an effective attack on illiteracy on a world-wide scale.

Adult Education Projects aiming at developing, technical and agricultural skills can be very helpful in raising the agricultural and industrial production in India.

Teacher Education

Education Commission on the Significance of Professional Education of Teachers

"A sound programme of professional education of teachers is essential for the qualitative improvement of education. Investment in teacher education can yield very rich dividends because the financial resources required are small when measured against the resulting improvements in the education of millions. In the absence of other influences, a teacher tries to teach in the way in which he himself was taught by his favourite teachers and thus tends to perpetuate the traditional methods of teaching. In a situation like the present when new and dynamic methods of instruction are needed, such an attitude becomes an obstacle to progress. It can be modified only by effective professional education which will initiate the teachers to the needed revolution in teaching and lay the foundations for their future professional growth. First-rate teacher training institutions can thus play a crucial role in the development of education."

"Of all the different factors which influence the quality of education and its contribution to national development, the quality, competence and character of teachers are undoubtedly the most significant. Nothing is more important than securing a sufficient supply of high quality recruits to the teaching profession, providing them with the best possible professional preparation and creating satisfactory conditions of work in which they can be fully effective. In view of the rapid expansion of educational facilities expected during the next three plans, and specially in view of the urgent need to raise standards to the highest level and to keep them continually improving, these problems have now acquired unprecedented importance and urgency."

Eight Types of Teacher Education Institutions

Broadly speaking teacher education institutions may be categorised under eight heads :—

1. Pre-primary Teacher Training Institutions catering to the needs of Kindergarten, Montessori, Shishu Mandirs, Bal Vihars, etc.

2. Training Schools for Elementary Teachers providing teachers for primary schools. These institutions are of two types—basic and non-basic. But this distinction is rapidly disappearing. Co-education is almost non-existent in such institutions. Generally speaking the course lasts two years and the minimum qualifications for entrance to these courses is Matriculation. The present emphasis in some States is to prescribe higher secondary as the minimum qualifications for entrance. Training institutions in most of the States are being run by the government.

3. State Institutes of Education. A notable development in the Third Five-Year Plan period is the opening of a State Institute of Education in every State and a few Union Territories. The main functions of these institutions are :

- (1) To provide in-service training to teacher educators and the inspecting staff connected with elementary education.
- (2) To undertake studies, investigations in all problems of education especially at the elementary stage.
- (3) To carry out periodic evaluative studies of the programme of training institutions, extension activities and the progress of elementary education in general and of basic education in particular.

4. Secondary Training Schools providing teachers for the middle or junior secondary schools. These schools are gradually disappearing.

5. Training Colleges for Graduate Teachers providing teachers for middle, high and higher secondary schools. The majority of these colleges are co-educational. The duration of the course one year. Degrees awarded are B.T., L.T. or B.Ed.

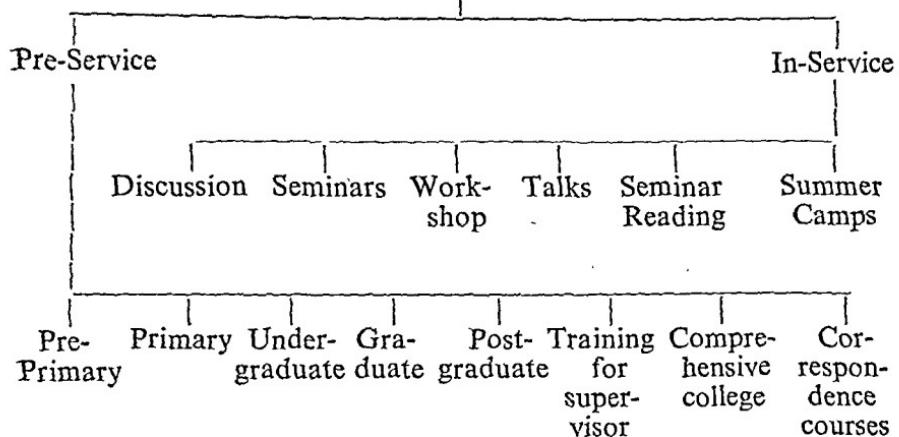
6. Training Colleges for M.Ed. and Ph.D. Classes providing opportunities to students to pursue Master of Education and Ph.D. courses. Usually these classes are held in some of the post-graduate colleges.

7. Training Colleges for Specialists preparing teachers in certain subjects like physical education, aesthetic education, home science, craft, languages, teaching of English and science.

8. Regional Colleges of Education. An important measure relating to the teacher education and especially to the diversification system of secondary education relates to the setting up of Regional Colleges of Education and their attached demonstration multipurpose schools at Ajmer, Bhubaneshwar, Mysore and Bhopal. The former three started in 1963, while the latter in 1964. These colleges arise in teacher education to train

competent teachers and teacher educators in certain critical areas like science, technology, industrial crafts, commerce and agriculture, so that they can function in their selected subject fields, in any system of education like technical, commerce and agriculture schools, and not only in multipurpose schools. Mainly, four types of programmes have been planned in the regional colleges with a total annual intake of 720 and total enrolment of 1870. These programmes are : four-year bachelor's degree programmes in science, technology, commerce, and agriculture and English ; one-year training programmes in science, commerce, and agriculture ; industrial crafts programmes of one, two and three-year duration ; and two-year master's degree programmes. The regional colleges are also undertaking a crash programme of training teachers to clear the backlog through correspondence-cum-summer schools, which may be regarded as sandwich courses.

Types of Teacher Education



Drawbacks of Teacher Education Programmes

Principal Gopal Dass Sahgal in an article entitled, "Teacher-Training Courses—Some Impressions" published in the Spring (1961) issue of the Indian Journal of Educational Administration and Research made the following observations:—

"It is generally claimed that the future of a country, even of the world, lies in the hands of the teaching profession. If that is so, there can be no pains too great, on inquiries too searching for the selection of recruits for this profession. But my experience showed me little evidence of any intelligent selection. In fact, there was no selection at all, because there was a shortage of candidates to fill up all the vacancies. Most of these training colleges in the Punjab suddenly came into existence not with the genuine urge to produce competent teachers but as side-shows to some existing degree colleges in order to bring handsome profits to their coffers. And this, such training colleges very much did for at least the first four or five years.

As time passed, however, there was a falling off of the trainees for admission and the colleges had to adopt a standard that had no rigour of its own. So long as a trainee conformed to the minimum standard of being a graduate he was admitted; thereby showing profound faith in the potentialities of every graduate to become a teacher."

And their lecturers? The majority had no school teaching experience. Scholars they no doubt were with high honours degrees, but as teachers they could by no means be called inspiring.

Persuade any young teacher to talk to you frankly about his days of training and more often than not he will tell you—"There isn't a single thing they taught me that has been any use to me since!" In short, he will tell you—"The teacher-training courses, as devised at present, are remote from reality, are unintelligent and futile."

Shri V. M. Puri in an article under the caption 'Teacher Training Courses in Uttar Pradesh', Published in the Winter (1961) Issue of the same magazine stated that Shri Sehgal's article should serve as an eye-opener and he left that most of what Shri Sehgal has said about Punjab may conveniently be said about Uttar Pradesh, "If anything the matters may be much worse there."

"The training colleges are fast losing the rigour traditionally associated with their work. The thorough search of the entrant both mentally and emotionally that used to be made, the sweating labour and the painstaking efforts that were required in preparing class notes and teaching, have all become a thing of the past and are being fast replaced by a sort-happy-go-lucky', 'take it easy, man' atmosphere.

Lower Calibre of the Staff. In the words of the Education Commission "The quality of training institutions remains, with a few exceptions, either mediocre or poor. Competent staff are not attracted, vitality and realism are lacking in the curriculum and programmes of work which continues to be largely traditional, and set patterns and rigid techniques are followed in practice teaching with a disregard for present day needs and objectives.

"To make matters worse," writes Salamatullah frankly, Students of education at all levels are, by and large, taught and guided by a staff which is mentally and academically of a lower calibre than its counterpart engaged in other fields of knowledge".

What is the academic status of the large number of our teachers who shape and fashion the destiny of India in our class-rooms? It has been estimated that nearly 70 to 71 percent are third divisioners. A first divisioner is hard to come by. What destiny can be shaped by these poorly educated teachers who occupy the bottom of the academic ladder? How can even the best teacher educators turn these intellectual geese into pedagogic swans?

The teachers' colleges are in a deep rut and they have to be pulled out of it.

Outdated Methods. T. N. Raina observed in article in 'The Hindustan Times' dated June 27, 1970, "The methods of teaching used by the teacher educators are so out-dated and ill-suited that they smack of academic jargon and childish prattle. Uninspiring lectures are delivered to an unquestioning herd in overcrowded lecture halls where a hundred listens as one. The lecture notes are polished year after year by constant repetition. Again, the methods that the leaders advocate to their 'Pupil' teachers are hardly practised by the advocates themselves. Small wonder then that the prospective teachers get disillusioned about the hollowness of the assertions so piously made and so blatantly broken."

Poor and Unacademic Environmental Conditions. T. N. Raina has further stated, "The environmental conditions in the training colleges are yet another dismal aspect of the situation. The faculty perceptions of an ideal pupils are hardly commendable. There is a great premium on uniformity and conformity rather than on diversity and creativity or 'the emergence' of the unique and the original". Subtle distinctions and multiple criteria are not tolerated. The pupil teachers fret and fume internally (teachers colleges have been singularly free from student unrest) and then gradually shy away from doubt, paradox, ambiguity and uncertainty. There is ruthless discipline which cramps individually, and the internal assessments and the awards at the annual ritual of practical examinations hang like the Damocles swords on their poor heads."

Unsound Theory Courses. The theory courses provided in the training colleges have not been built on sound theoretical and empirical foundations, a practical application of which would produce demonstrable results. Secondly, there are some basic misconceptions and logical fallacies in the expectations from these courses.

Depressing Model Lessons. The pupil-teachers regard practice-teaching as the most depressing part of their training. The cadets are warned to follow the techniques demonstrated to them during 'model' lessons by the college-leaders who are the sole custodians of these tricks-of-the-trade. It is against these demonstrations that a cadet's performance is evaluated.

To summarise, the following defects may be stated :—

1. Isolation of the teacher training institutions from the University Education.
2. Isolation of the teacher training institutions from the daily life of the schools.
3. Lack of adequate staff in the training colleges.
4. Lack of talented staff in the training colleges.
5. Lack of dynamic curriculum.

6. Lack of realism in the programme.
7. Lack of demonstration schools.
8. Lack of a healthy and democratic environment.
9. Lack of accommodation.
10. Lack of equipment.
11. Lack of a suitable admission policy.
12. Lack of experimentation and Research.

Selection of Teachers for Training Institutions

Different Methods being Followed

1. Selection on the basis of academic qualifications.
2. Selection on the basis of interview.
3. Selection on the basis of interview and academic records.
4. Selection on the basis of the convenience of the authorities which sometimes includes acceptance of donations and recommendations.
5. Selection on the basis of psychological and aptitude tests.
6. Selection in the Central Institute of Education, Delhi on the basis of
 - (i) Interest Inventory.
 - (ii) Intelligence Test.
 - (iii) Aptitude Test.
 - (iv) General Knowledge Test.
 - (v) Group Discussion.
 - (vi) Interview.

No one set of selection procedure is followed in every state and college. However, generally speaking it may be observed that private colleges do not adopt any scientific procedure of admission with the result that sometimes unsuitable persons join the teaching profession and bring discredit to the teaching profession. A good procedure will incorporate some of the items mentioned at 6.

Recommendations of the Study Group on Training of Elementary Teachers in India (1961-1962)

Significance of the Programme. The Study Group observed, "No other single factor can make such a vital difference for the better, as a proper system of teacher education and a "break-through" here is urgently necessary. It does not really involve any 'additional' expenditure; all that it implies is the incurring of an expenditure, which will ultimately have to be incurred under any circumstances, but which would lead to great improvement in quality, if incurred in the near future. This programme should, therefore, receive high

priority in the remaining period of the third plans as well as in the fourth plan."

I. Clearing the Backlog of Untrained Teachers

(i) A substantial number of these untrained teachers would be above 35 years of age and would have put in a service of 10-15 years. Little useful purpose is likely to be served by sending them for a regular course of pre-service training. Their training should be undertaken through short term in-service course.

(ii) For teachers below the age of 35 who have put in 5 to 10 years of service, the pre-service training course should be of one year.

(iii) Full-term training courses would be required for those untrained teachers who have put in less than 5 years of service and are below 35 years of age. The number of additional training places would have to take account of these untrained teachers.

II. Correspondence Courses. Correspondence courses are particularly suited for clearing this backlog of untrained teachers. They would not take away the teachers from their schools for any length of time; and teachers in categories (i) and (ii) above may be trained effectively through correspondence, supplemented by some short-term courses, mainly for practical work.

III. Expansion of Training Facilities. A large expansion of training facilities is necessary and steps to secure this should be taken immediately. In estimating the requirements of additional places in training institutions for elementary teachers, a pupil-teacher ratio of 45 may be adopted. This would mean a pupil-teacher ratio of about 50 in classes I-V and of about 40 in classes VI-VIII.

The minimum size of a training institution should be 150, preferably 200. This would secure efficiency as well as economy.

The facilities for teacher training should be so expanded that the annual output of training institutions would match the annual requirement of additional teachers. To achieve this equilibrium between the supply and demand for trained teachers is the most significant programme in the 'break-through'.

IV. Appointment of Study Groups. Each State and Union Territory Administration immediately should set up a Study Group to—

(a) Work out detailed estimates of the additional enrolment in the elementary schools up to 1975 and the additional teachers required annually;

(b) Assess the size of the existing backlog of untrained teachers and prepare a detailed scheme for clearing the backlog;

(c) Examine the possibilities of expanding the capacity of existing institutions;

(d) Determine the additional training places which need to be created so that, the output on the basis of a two-year course should match the annual requirements (estimates to be worked out separately for primary and middle schools) and

(e) Work out the estimates of the cost and the phasing of the whole programme.

V. Location and Planning of Training Institutions. The location and planning of training institutions should be done with great care. The following general principles are suggested in this regard :

(a) A district should be taken as the unit of planning and each district should be provided with as many training institutions as are required to meet the demand of elementary teachers within its area ;

(b) Since 80 per cent of the population is rural, about four-fifths of the training institutions should be located in rural areas ;

(c) As the training institutions need practising schools of a fair size, an ideal location for a training institution would be a township with a population between 5,000 and 15,000. This will provide the necessary facilities of a practising school on the desired scale without detracting from the rural character of the location ; and

(d) The institutions should be so located that they would be easily accessible from all parts of the district.

VI. Cost of the Programme. Each State and Union Territory should prepare a blueprint of an elementary training institution of the optimum size and work out the details of its total cost—both capital and recurring.

VII. General Education of Elementary School Teachers. The following policies should be adopted in respect of the general education of elementary school teachers :

(a) As soon as practicable, the recruitment of teachers for primary and middle schools should be only from those who have passed the Matriculation or equivalent examination.

(b) Beyond the deadline fixed, for the recruitment of matriculates only, the selection of a non-matriculate teachers should be permitted in the following exceptional cases :—

(1) For tribal or remote areas, if suitable matriculate teachers are not available ; and

(2) Women teachers in rural areas, if no matriculate women teachers are available.

(c) Even in the exceptional cases mentioned in (b) above suitable measures should be adopted to see that the need to recruit non-matriculate teachers disappears as quickly as possible.

(d) The employment of graduate teachers in elementary schools should be encouraged. It is desirable that the headmaster of every primary school with more than 250 children should be a graduate.

VIII. Duration of the Training Course. The duration of the elementary course should be two years for all teachers who have completed secondary school, or the higher secondary or even the intermediate course. For those who have not completed the secondary school, the duration of the training course should be three years which should be divided into two periods—a continuous pre-service training programme of one year.

IX. Revision of Syllabi. The existing syllabi of training institutions for elementary teachers need considerable revision. This work should be undertaken by the National Institute of Education in collaboration with the representatives of the State Governments and selected Principals of training institutions.

X. Training of Teacher Educators. Special in-service training courses should be organised for teacher educators. It is desirable that universities should provide specialised courses at the M.Ed. level to prepare teacher educators for training institutions.

XI. Improving the Physical Conditions in Training Institutions. A blueprint of the minimum essential needs of a training institution for elementary teachers should be prepared and immediate steps should be taken to improve the physical conditions in training institutions, such as buildings for class-rooms, hostels, staff quarters, libraries, laboratories, land for the farm and teaching equipment.

XII. In-service Teacher Education. The ultimate objective should be to give, to every elementary teacher, in-service training of not less than two months duration in every five years of service.

XIII. Extension Service. The scheme of the National Council of Educational Research and Training for establishment of extension service centres in training institutions for elementary teachers is welcome.

XIV. State Institutes of Elementary Education. State Institutes of Elementary Education should be established as early as possible.

XV. Incentives and Facilities for Further Self-Education. Adequate incentives and facilities for further education should be provided to elementary school teachers.

XVI. Production of Educational Literature in Indian Languages. The primary responsibility for this programme should be on the National Council of Educational Research and Training and the State Institutes of Elementary Education. The organisations of teachers have a particularly important role to play in this sector and should be encouraged in all possible ways to assume a share of this responsibility.

XVII. Comprehensive Organisation for Teacher Education. The programme for the reform of teacher education cannot be implemented effectively through *ad hoc* measures ; it must be supported by an adequate organisation.

XVIII. State Councils of Teacher Education. In every State there should be a State Council of Teacher Education, consisting of the Director of Education; representatives of the University Departments of Education, representatives of Principals of training colleges for secondary teachers, representatives of the Principals and teachers of training institutions for pre-primary and elementary teachers, and non-official educationists. The Council will deal with teacher education at all levels, pre-primary to secondary.

XIX. Special Officer for Training Institutions. Every State should have a Special Officer (or any other suitable administrative machinery) whose whole-time responsibility would be for the programmes of training institutions and that the annual inspections of the training institutions should be carried out by panels of experts.

XX. Department of Teacher Education in the NIE. The decision to establish a Department of Teacher Education in the National Institute of Education is welcome.

Education Commission (1964-66) on Teacher Education

1. Removing the Isolation of Teacher Training. The Commission felt that in order to make the professional preparation of teachers effective, teacher education must be brought into the mainstream of the academic life of the Universities, on the one hand, and school life and education development on the other.

The Commission suggested the following :

(a) Recognition of education as an independent academic discipline and its introduction as an elective subject in the B.A. and B.Sc. and M.Sc. degree courses ;

(b) Establishment of schools of education in selected universities to develop programmes in teacher education and studies and research in education, in collaboration with other university disciplines ;

(c) Reorganising extension work as an essential function of a teacher education institution and establishing Extension Service Department in each institution—pre-primary, primary and secondary—as an integral part of it ;

(d) Establishment of effective alumni associations to bring old students and faculty together to discuss and plan programmes and curricula ;

(e) Organisation of student practice teaching in active collaboration with selected schools which should receive recognition from the Education Department as co-operating schools and a special ancillary grant for equipment and supervision ;

(f) Arranging periodic exchange of the staff of the co-operating schools and of the teacher education institutions for the advantage of each category of staff ;

(g) Establishing comprehensive colleges of education in each State on a planned basis ; and

(h) Establishing State Boards of Teacher Education in each State to be responsible for all functions related to teacher education at all levels and all fields.

2. Improving Professional Training. For improving the quality of the programme of teacher education the Commission made these suggestions :—

(a) Undertaking well-planned subject orientation or content courses leading to insight into basic concepts, objectives and implications of subjects to be taught in collaboration with university departments ;

(b) Introducing integrated courses of general and professional education in universities ;

(c) Vitalising professional studies and basing them on Indian conditions through developing research ;

(d) Using methods of study which leave greater scope for self-study and discussion and methods of evaluation which include continuous internal assessment of practical and sessional work besides practice teaching ;

(e) Improving practice-teaching and making it a comprehensive programme of internship ;

(f) Developing special courses and programmes ;

(g) Revising the curricula and programmes at all levels of teacher education in the light of the fundamental objectives of preparing teachers for their varied responsibilities in an evolving system of education ; and

(h) Improvement of training institutions.

3. Duration of the Course. The duration of the professional courses to be two years for primary teachers who have completed the secondary school course and one year for the graduate students. The number of working days in a year to be increased to 230.

4. Survey of Teacher Education Programme. The State Boards of Teacher Education to conduct a survey of teacher education programmes and curricula and initiate the necessary revision.

5. New Professional Courses. New professional courses to be developed to orientate headmasters, teacher educators, educational administrators, to their special field of work.

6. Flexible Post-graduate Course in Education. The post-graduate courses in education should be flexible and be planned to

promote an academic and scientific study of education and to prepare personnel for special fields of education, requiring special knowledge and initiation. They should be conducted by persons with real competence for such work.

7. Improving Teacher Education Institutions. The Commission suggested :

(i) The staff of secondary training colleges should have a double Master's degree in an academic subject and education ; a fair proportion should hold doctorate degrees ; they should have taken induction or orientation courses to teacher education.

(ii) Qualified specialists in psychology, sociology, science or mathematics may be appointed even if they have no professional training.

(iii) Summer Institutes should be organised for the in-service training of staff.

(iv) No student should be allowed to specialise in the teaching of a subject unless he has studied it for his first degree or obtained an equivalent qualification prior to training.

(v) State and Union territories should adopt as a rule that teachers in secondary schools will ordinarily teach only those subjects they had studied at the college level.

(vi) If students are required to teach subjects other than those they have studied, they should take a special course either by correspondence or in the summer Institute.

(vii) Attempt should be made to recruit first and good second class students in teacher training institutions and adequate scholarships should be given to them.

(viii) All tuition fees in secondary training institutions should be abolished and liberal provision made for stipend and loans.

(ix) Every Training Institution should have an Experimental or a Demonstration School attached to it.

8. Training Institutes for Primary School Teachers. (i) The staff in institutions for training primary teachers should hold a Master's degree either in Education or in an academic subject as well as B.Ed. and should have undergone special induction courses in Teacher Education at primary level.

(ii) New appointments of primary teachers should be restricted to those who have completed at least 10 years' general education ; exceptions may be made for women teachers and teachers in tribal areas.

(iii) Correspondence courses and liberal concessions for study leave should be made available to unqualified teachers in primary schools to improve their qualification.

(iv) Special courses for graduates entering primary teaching should be organised.

(v) The duration of the training courses for primary teachers should be uniformly two years for those who have completed the secondary school courses. Teachers with different educational qualifications should not be put into the course.

(vi) All tuition fees in primary teachers' training institutions should be abolished and liberal provisions made for scholarships, stipends and loans.

(vii) Substantial increases should be made in the hostel and residential facilities in primary training establishments.

(viii) Demonstration or Experimental schools should be attached to Primary Training Institutions.

9. Expansion of Training Facilities. Each State should prepare a plan for the expansion of training facilities in its area so that the output of trained teacher meets the demand for teachers.

Supplementary part-time facilities should be provided on a large scale.

The backlog of untrained teachers should be cleared during the Fourth Five-Year Plan through suitable measures.

10. In-Service Education. Systematic and co-ordinated programmes of in-service education, in content and method, should be organised by Universities, Teacher education Institutions and Teacher Organisations, for teachers at all levels, on a large scale so that every teacher would receive at least two or three months' in-service education in every five years of his service.

The programme of summer institutes for the in-service training of secondary school teachers should be extended, with systematic follow-up and active collaboration among the agencies concerned and stimulation of further research in Education.

11. Professional Preparation of Teachers in Higher Education.

(i) Some orientation is necessary for teachers in higher education and suitable arrangements should be made.

(ii) Newly appointed lecturers should be given some time to acclimatise themselves to the institutions and should be encouraged to attend lectures of good teachers.

(iii) Regular orientation courses for new staff should be organised in every university and where possible, every college.

(iv) In the bigger universities or groups of universities, these courses may be placed on a permanent basis by establishing a staff college.

12. Standards in Teacher Education. (i) The UGC should take the responsibility at the national level for the maintenance of standards in teacher education. The State Board of Teacher Education should be responsible for the raising of standards at the State level.

(ii) A substantial allocation of funds should be made available by the UGC in the Fourth Five-Year Plan for improvement in teacher education.

(iii) The UGC should set up a standing committee for teacher education consisting of persons from the profession to deal with standards of teacher education.

(iv) The Government of India should make provision of funds in the Centrally sponsored sector to assist State Governments develop teacher education.

Teacher Training Institutions, 1969-70

State/Union Territory	Number of Institutions and Students			
	Teachers Training Colleges	Number of Students	Teachers Training Schools	Number of Students
Andhra Pradesh	13	3238	85	7,229
Assam	6	717	35	2,930
Bihar	7	800	94	15,000
Gujarat	28	3000	66	6,898
Haryana	15	2585	—	4,226
Himachal Pradesh	3	540	6	902
Jammu & Kashmir	2	421	18	1,496
Kerala	19	2472	105	13,488
Madhya Pradesh	12	2676	39	5,288
Maharashtra	37	5117	209	24,834
Mysore	18	2914	116	15,676
Nagaland	—	—	3	267
Orissa	36	908	26	4,456
Punjab	17	3159	8	1,350
Rajasthan	18	2350	12	1,680
Tamil Nadu	23	2882	139	8,480
Uttar Pradesh	25	7595	260	18,714
West Bengal	44	6320	83	5,839
A & N Islands	—	—	1	100
Chandigarh	1	260	1	165
Dadra & Nagar Haveli	—	—	—	—
Delhi	4	1115	1	75
Goa, Daman & Diu	1	125	2	302
L. M. & A. Islands	—	—	—	27
Manipur	1	200	5	540
NEFA	—	—	1	61
Pondicherry	—	—	2	253
Tripura	6	685	—	452
Whole of India	336	50,079	1317	1,40,788

Percentage of Trained Teachers in Schools

<i>Year</i>	<i>Primary</i>	<i>Middle</i>	<i>High/Higer Secondary</i>
1949-50	58.3	52.6	53.6
1969-70	82.2	79.8	75.6

Intake Capacity of Teachers Training Colleges

<i>Category</i>	<i>B.T., B.Ed., L.T. M.Ed. etc.</i>	<i>1969-70 Junior Training</i>
Men candidates	33843	93800
Women candidates	16236	47900
Total	<u>50079</u>	<u>140800</u>

The total number of school teachers in 1969-70 was 22.34 lakhs. The percentage of women teachers being 24.7 and of trained teachers was 79.9.

Recent Developments in Teacher Education

With the acceptance of the objectives of universal, free, compulsory elementary education in the country, the task of securing an adequate supply of qualified teachers assumed enormous proportions. The position in 1947 was very depressing. As against the total requirement of 2.8 million teachers necessary to implement the programme of universal elementary education, only about 561,000 were available in 1946-47, the average primary teacher had completed only the middle school. In 1949-50, 41.68 percent in primary, 47.4 percent in middle and 46.4 percent in high schools; had received no professional training. Steps were taken to reduce this backlog by starting new training schools, increasing the intake capacity of the existing schools, adding training classes to high schools and instituting short in-service courses. Some States resorted to reducing the period of training. In secondary teacher education, more universities started faculties of education and affiliated colleges started preparation of teachers.

Summer-cum-Correspondence Courses. An important step taken in this direction has been the organising of summer schools-cum-correspondence courses leading to B.Ed. degree at all the Four Regional Colleges of Education. This course includes full time training at the summer vacations (4 months) and instruction through correspondence during the ten months period between the two summer vacations.

The enrolment during 1969-70 at these colleges was 1764. The Central Institute of Education also started B.Ed. correspondence.

Reforms in the Professional Training of Teachers. In the professional training of primary and secondary school teachers, the following changes were made during 1970-71 :—

- (i) Revised curricula were prepared.
- (ii) Content was integrated with methodology.
- (iii) Practical training was made functional by providing facilities to trainees to visit different types of schools, such as rural and urban schools, single-teacher schools, etc.
- (iv) A study regarding the administrative procedures for ascertaining requirements of teacher training institutions both at elementary and secondary levels was undertaken and a workable scheme of admission procedures was evolved for being recommended to the training institutions in the country.

In-service Training of Teachers. The various departments of the NCERT at the national level and specialised institutions like State Institute of Education, State Institute of Science Education, State Evaluation Units, State Bureaux of Educational and Vocational Guidance etc. have been conducting programmes of in-service training of teachers in their respective spheres.

The programme of Summer institutes and orientation courses and instructional techniques initiated by the University Grants Commission has made sustained progress and has grown in dimensions. During 1970-71, in collaboration with the NCERT/USAID/NSF/British Council, the commission organised 60 summer science institutes which were attended by 2,400 school teachers. By the end of 1970, 353 such institutes had been organised in science subjects with 14,000 participants. The Commission also organised in collaboration with the NSF/USAID, 56 summer science institutes for college teachers under the auspices of various universities in 1970, attended by 1,900 college teachers. About 11,000 college teachers had attended 300 summer-science institutes organised till 1970-71. Besides, 13 summer institutes in English language teaching were organised for college teachers during 1970 in collaboration with the Central Institutes of English, Hyderabad, and the British Council. 400 teachers participated in these institutes. A total of 53 summer institutes in English language teaching had been organised up to 1970-71 and with 2,600 teachers participants.

The Commission organised two summer institutes in 1970-71, one each in Molecular Physics and Life Sciences, under the auspices of the Madras and Marathwada Universities respectively for the benefit of outstanding post-graduate students. Twelve orientation courses for new and junior teachers from colleges were organised under the auspices of the various universities during the same year with a view to familiarising the teachers with planning of courses of study, phasing out the teaching programme, holding the class tests and examinations, setting up of question papers, correction work, evaluation of student performances, etc.

National Council of Educational Research and Training. In 1961, an event of great significance in the field of teacher education

was the establishment of the National Council of Educational Research and Training. The Council set up a National Institute of Education as a national organisation to offer high level teacher education and to investigate into the problems of education and suggest solutions for them. Its objectives, among others, are to examine, evaluate and co-ordinate the programmes of teacher education conducted by the State Departments of education and the universities and to take all such measures as will lead to an improvement in teacher education at elementary and secondary levels.

State Institutes of Education. Since 1964, a chain of State institutes of education has been set up in almost all the States with the assistance of the Union Government. The main purposes and functions of the institutes, are among others, to provide various training courses for the supervisors of schools or teacher educators, organise conferences and seminars for senior State education officers, or non-official office bearers of local bodies, connected with education, provide, conduct or supervise extension service to training institutions for elementary teachers, organise research to provide correspondence courses for teachers, to improve the programme of teacher education in the State and to assist the State education departments in the preparation and implementation of educational plans.

Regional Colleges of Education. Another important project for teacher education in the diversified system of secondary education relates to the setting up of Regional Colleges of Education and their attached demonstration multipurpose schools of Ajmer, Bhubnaeshwar, Mysore and Bhopal. The first three started in 1963 while the latter in 1964. These colleges are designed to represent a new enterprise in teacher education to train competent teachers and teacher educators in certain critical areas like science, technology, industrial crafts, commerce and agriculture, so that they can function in their selected subject fields, in any system of education like technical, commerce and agriculture schools, and not only in multipurpose schools. Mainly, four types of programmes have been planned in the regional colleges. These programmes are : four-years bachelor's degree programmes in science, technology, commerce, and agriculture and English ; one-year training programmes in science, commerce, and agriculture : industrial crafts programmes of one, two and three-year duration ; and two-year master's degree programme. The regional collegess have also undertaken a crash programme of training teachers to clear the backlog through correspondence-cum-summer schools, which may be regarded as sandwich courses.

Inter-Disciplinary Approach. The most remarkable feature of the Regional Colleges is the inter-disciplinary approach to teacher education. The first attempt in this direction was made by Kurukshetra University in 1960. The NCERT has broken new ground by experimenting with four-year B.Ed. courses on a national scale in many areas.

Comprehensive Colleges. A comprehensive college of education prepares teachers for several stages of education and/or for a number of special fields. Some institutions of this type already exist and have shown good results. The Education Commission recommends that planned attempts should be made to develop more institutions of this type and add sections for training primary and/or pre-primary teachers to training colleges that now prepare teachers for secondary schools only.

In-Service Education

Importance. Rabindranath Tagore thinks : "A teacher can never truly teach, unless he is still learning himself. A lamp can never light another lamp unless it continues to burn its own flame."

The Report of University Education Commission appointed by the Government of India contains the following passage :—

"It is extraordinary that our school teachers learn all of whatever subject they teach before reaching the age of twenty-four or twenty-five and then all their further education is left to experience which in most cases is another name for stagnation. We must realise that experience needs to be supplemented by experiment before reaching its fullness and that a teacher, to keep alive and fresh should become a learner from time to time. Constant outpouring needs constant intaking ; practice must be reinforced by theory and the old must be constantly tested by the new."

Meaning of In-service Teacher Education. The term is self-explanatory. It refers to the education a teacher receives after he has entered the teaching profession and after he has had his education in a teachers' college. It includes all the programmes, educational, social or others, in which the teacher takes a vital part, all the extra education which he receives at different institutions by way of refresher and other professional courses, and all the travel and visits which he undertakes. All these things enlarge his experience and vision.

The Commission on Teacher Education in USA explained this clearly as :—

"The continued education of teachers means much more than making up defects in preparation. It means continuous growth in the capacity to teach. It means broadened understanding of human development and human living. And now more than at any previous period in school history it means growth in one's capacity

to work with others, with class-room teachers and principals in a variety of activities, with the administration, with parents and community leaders and with children of different age-groups."

Dr. Alteker writes, "We have to point out that like some modern educationists ancient Indians also have used the term education in a wider as well as in a narrower sense. In its wider sense education is self-culture and self-improvement and the process will go on to the end of one's life." A thinker observes that the true teacher is a student to the end of his life. No college or course can teach a doctor all that he has to learn; his practice will go on gradually widening the sphere of his knowledge. What is true of the doctor is also true of the teacher, the lawyer, the painter, the trader and the sculptor.

He must catch the spirit of Thomas Arnold, the eminent teacher at Rugby who said, "I prefer that my students should drink from a running stream rather than a stagnant pool".

The Ministry of Education in England has stated this as :

"The hallmark of a good teacher is that he is himself always learning and always developing his knowledge and understanding of children and young people. In short a teacher should be a person who, because of his attitude to knowledge, to ideas, to his fellows and to life generally is better educated today, than he was yesterday and will, tomorrow better educated than he is today."

Programmes of In-Service Education

Following observations were made by H. S. S. Lawrence in *In-service Teacher Education* :—

1. In-service education is not the responsibility of the teacher alone. It is a cooperative enterprise. It has to be promoted by several agencies. The agencies are schools, teachers' colleges, Governments' and teachers' organisations. Self-development of professional competencies by individual teachers has a large part to play in in-service teacher growth.

2. Proper incentives should be provided for teacher growth in-service. The basic incentive is provided by the dynamic of life in independent India. But inherent motivations should be supported by better rewards for effort and quality of service.

3. Individual teachers should follow ideals of service and undertake further education, educational tours and visits, participate in community development and develop good human relations and professional activities in school.

4. The schools themselves should organise in-service education programmes, undertake democratic school administration and provide constructive supervision.

5. Teachers' colleges should provide leadership in in-service

education programmes, foster experiment, provide short-term professional courses for teachers, conduct workshops and promote professional writing.

6. Teachers' organisations should also provide leadership in bringing about professional growth, cooperate with the Government and lay special emphasis on the provision of professional activities rather than only on the financial improvement of their members.

7. The Government should provide constructive inspection, provide in-service programmes and give financial assistance to other agencies to undertake in-service education programmes.

The task before us is tremendous. But it is tremendously important. There is need for in-service teacher education. What is essentially required is a new spirit and enthusiasm on the part of all concerned. Teachers should develop the new spirit of growth demanded of them. They must grow with the times. They must become teachers fit for our times in India.

What is Workshop? By laying stress on the application or rather than the amassing of knowledge, workshops provide opportunities for teachers to work on and find solutions for the practical real problems faced daily by them. They are concerned with 'the critical problems our schools face in a world at war'.

The essential features of what we shall call a workshop are intensive consideration of practical problems that have arisen from the daily functioning of the teaching job, flexible and informal working conditions, active sharing by workshoppers in developing plans for individual or group study and easy access to a wide range of resources in terms of staff, fellow participants, books and other aids to learning.

For keeping workshop feet solidly, rooted to earth, workshop members must work closely with the young who are the raw materials of our educational endeavours. This applies to staff as well as participants. If a staff member can show that prized abstractions work pragmatically with young students he has gone long a way in his quest for a good relationship with the working teachers who largely make up workshop personnel. A workshop for teachers which includes no personal contact with young people is Hamlet minus the Lelancholy Dane himself.

Incentive to Teachers. In order that the scheme of refresher courses may become a real success, the authorities of schools and Intermediate colleges and the Government education departments should make certified attendance at a university refresher course once in every four or five years a qualification for promotion. Some such stimulus be necessary until attendance at such refresher courses becomes a tradition...Alternatively, teachers may be given leave of absence for six months after every five years of service and asked to attend advanced courses at their own or any other university and

obtain a certificate of attendance and good work from the head of the Department of the university.

Changed Supervision. The changed attitude and work of Her Majesty's Inspectors of Schools is worthy of note :—

'Increasingly in recent years, the Inspectorate have come to be looked on, and have come, we believe, to look on themselves as, above all, consultants and collaborators able to bring to the problems of any one school, experience called in many, and to contribute to the solution of difficulties, a judgment at once disinterested and well-informed. To stimulate by discussion and suggestion, to spread ideas and be a link between school and school, to provoke the unreflective to thought and to awaken healthy doubts, as to the sufficiency of familiar routines in such service lies the most valuable function of the Inspectorate and we would stress the very special value of its guidance and encouragement to the hundreds of small schools where teachers, often inexperienced are working under conditions of difficulty and isolation.'

Vacation Refresher Courses. The University Education Commission observed :—

"An urgent reform is the introduction of vacation refresher courses for high school and Intermediate college teachers. At present neither students nor teachers utilise their vacation for most of them vacation is a period of want of occupation."

The Madras Government used to have vacation courses at Ootacamund for some years, but we were told that they have also been discontinued." (see Previous Chapter also.)

A New Deal for the Teachers

Mr. William Carr, Secretary-General of the World Confederation of Organisations of the Teaching Profession, stresses for a New Deal for the Teacher:—

'The status of the teacher in this world will be achieved when every teacher is immensely proud of his calling. I do not mean proud, I say proud, so that he feels a quiet satisfaction in what he is able to follow this calling. And when every teacher is proud, then we shan't hear so much about the status. We won't hear teachers say, when someone asks them what they live for living, "I am just a kindergarten teacher" or "just an elementary teacher", or "I'm only a teacher of science in a secondary school". You don't hear doctors say, "I'm only a brain surgeon." We will come to the point when the words "just" and "only" will be dropped and we will be happy and proud to say, "I am a teacher".'

We are entitled to feel this pride because the work of the teacher is at the basis of the work of mankind. A child may come into the school with two leaves, one brown and one green and ask the teacher, "How does this happen? Why is one leaf brown and the other green?" In that simple process all the great scientific laboratories of the world, all the great scientists, all the discoveries of the past and of the future, that will enrich the life of mankind, are wrapped up.

Another child, comes into school and says, "Johnny hit me in the playground and I want you to punish Johnny because he hit me", and the teacher calls Johnny in and the two talk it over and try to find out what caused this exchange of incivilities. It seems like a routine, trifling sort of occupation if you don't look at it too deeply; but all the courts of law and justice, all the great systems of treating human rights with dignity, all the systems of jurisprudence are wrapped up in that description.

The child looks at a piece of paper and sees some black marks on a white surface. These black marks send light rays through the lens and into the retina of the eye. After a while, under proper instruction the child says. That is 'A' and all the libraries in the world and all the authors and all the daily newspapers, all the magazines, all the creations of art and of drama are wrapped up in this simple, basic recognition.

The Teacher—a Catalyst. So I think we don't strain a point when we say we are proud to teach. I think we can build the status of the teacher with the simple knowledge that what we do in this area is final and is a turning point in the lives of children.

The Director-General of UNESCO has asked us for advice. If it were possible to summarise our discussion in five sentences, I would say this :

1. The higher the public respect for the schools, the better the status of the teachers ; it is bad for teachers to be underpaid ; it is even worse for education to be undervalued ;
2. The better the payment and security of teachers, the better their status ;
3. The better the preparation and in-service education of teachers, the better the status ;
4. The greater the skill of the teacher in the class-room, the better the status ;
5. The more united the profession, the better the status of its members."

Teacher's Status and the Education Commission 1964-66

1. Status. Intensive and continuous efforts are needed to raise the economic, social and professional status of teaching and to feed back talented young persons into the profession.

2. Remuneration. The Commission stressed that the most urgent need was to upgrade the remuneration of teachers substantially, particularly at the school stage and it recommended that the Government of India should lay down, for the school stage, minimum scales of pay for teachers and assist the States and Union Territories to adopt equivalent or higher scales to suit their conditions. Regarding scales of pay of school teachers belonging to the same category but working under different managements such as government, local bodies or private management, the Commission recommended that they should be the same.

The Commission proposed the following scales of pay, the implementation of which may be phased over a programme of five years :—

<i>Teachers</i>	<i>Remuneration</i>
1. Teachers who have completed the secondary school course and have received two years' professional training.	Minimum for trained teachers ...Rs. 150 Maximum salary (to be reached in a period of 20 years) ...Rs. 250 Selection Grade (for about 15 p.c. of the cadre) ...Rs. 250-300
2. Graduates who have received one year's training.	Minimum for trained graduates ...Rs. 220 Maximum salary (to be reached in a period of 20 years) ...Rs. 400 Selection Grade (for about 15 p.c. of cadre) ...Rs. 400-500
3. Teachers working in secondary schools and having post-graduate qualifications.	...Rs. 300-600
4. Heads of secondary schools.	Depending upon the size and quality of the school and also on their qualifications, the headmasters should have one or other of the scales of pay for affiliated colleges recommended below.
5. Teachers in Affiliated Colleges (already approved by Government).	Lecturer Junior Scale. ...Rs. 300-25-600 Senior Scale. ...Rs. 400-30-600-40-800 Senior Lecturer/Reader ...Rs. 700-40-1100 Principal I ...Rs. 700-40-1100 II ...Rs. 800-50-1250 III ...Rs. 1000-50-1500 Lecturer ...Rs. 400-40-800-50-950 Reader ...Rs. 700-50-1250 Professor ...Rs. 1100-50-1300-60-1600.
6. Teachers in University Departments (already approved by Government).	

3. The Government of India should lay down, for the school stage minimum scales of pay for teachers and assist the States and Union Territories to adopt equivalent or higher scales to suit their conditions.

4. Scales of pay of school teachers belonging to the same category but working under different managements, such as government, local bodies or private managements should be the same.

5. The principle of parity should be adopted as a State policy forthwith in each State but its full implementation may, if necessary, be phased over a programme of five years.

6. To facilitate the introduction of the improved scales of pay at the university stage, assistance from the Centre should be provided to meet additional expenditure on a sharing basis of 80 per cent from Central and 20 per cent from State funds, and in the case of private colleges, Central assistance should be provided on a 100 per cent basis.

7. The introduction of these scales of pay should be linked with improvement in the qualifications of teachers and improvements in the selection procedures for their appointment. This should be done on the lines of recommendations of the Committee on Model Act for Universities.

8. A discriminating approach should be adopted, in regard to these, for privately-managed colleges. Good institutions should be allowed greater freedom in the choice of their teachers and satisfactory control should be exercised where management is not ~~envisaged~~.

9. Three main scales of pay should be recognised for school teachers :

- (i) for teachers who have completed the secondary school stage and are trained ;
- (ii) for trained graduates ; and
- (iii) for teachers with post-graduate qualifications.

10. There should be no teacher at the primary stage who has not completed the secondary school course and had two years of professional education. Headmasters of higher primary and lower primary schools with enrolments of more than 200 should be trained graduates. Their salaries should be the same as those of trained graduate teachers in secondary schools.

11. The practice of creating posts in lower scales of pay and recruiting to these, teachers with lower qualifications when qualified teachers are available or recruiting qualified teachers into these posts and paying them at lower scales should be abandoned.

12. Scales of pay of secondary school teachers should be related to scales of college and university teachers on the one hand to those of primary teachers on the other.

13. Scales of pay for headmasters of lower and higher secondary schools should have a definite relationship with those of teachers in affiliated colleges or even universities. Depending upon the size, function, and quality of schools, the proportion of teachers with post-graduate qualifications should vary from 10 to 30 per cent in secondary and higher secondary schools ; teachers with first and second class in B.A./B.Sc. or M.A./M.Sc. should be given advance increments in the scale. Professional training should be obligatory for all secondary school teachers.

14. **Qualifications and Recruitment of School Teachers.** State Boards of School Education and the Education Department should prescribe qualifications of teachers and lay down proper procedures for selection not only for Government schools but for those conducted by local authorities and private managements as well ; local authority schools would largely come under the District School Boards : every private school recognised and aided by State Education Departments should be required to have a managing committee with representatives from the Department ; the Department should prescribe the qualifications for teachers similar those in Government institutions ; every post to be filled should be adequately advertised and interviews held by duly constituted selection committee ; no grant-in-aid should be paid for the salary of a teacher appointed outside the rules or the above machinery.

15. **Promotional Prospects. School Stage.** Qualified and trained teachers in primary schools should be considered for promotion as headmasters or inspectors of schools.

16. Trained graduate teachers in secondary schools who have done outstanding work would be eligible for promotion to posts carrying salaries for post-graduate qualifications.

17. Secondary school teachers with the necessary aptitude and competence could be appointed as university and college teachers.

18. Advance increments for teachers doing outstanding work should be made possible.

19. *University Stage.* *Ad hoc* temporary posts in a higher grade should be created for a lecturer or a reader who had done outstanding work and who cannot be given promotion as no suitable post is available.

20. In departments doing post-graduate work, the number of posts at professorial level should be determined on the basis of requirements ; it should be open to a university in consultation with UGC to offer remuneration even beyond the special scale of Rs. 1600-1800 to outstanding persons.

21. **Relating Salaries to Costs of Living.** All teachers salaries should be reviewed every five years and the dearness allowance paid to teachers should be related to that paid to Government servants.

22. Welfare Services. A general programme of welfare services for all school teachers should be organised in each State and Union Territory, the funds being contributed by both teachers and the State on a matching basis. The fund should be administered by joint committees of representatives of teachers and government.

23. Need for Central Assistance. The proposals for the improvement of salaries of school teachers should be given effect to immediately, generous Central assistance being made available to State Governments for this purpose.

24. Retirement Benefits. The system of retirement benefits to teachers should be treated on the basis of the principles of uniformity and parity.

25. As an interim measure, the triple-benefit scheme should be more widely adopted both for teachers in Government schools as well as the University and college teachers.

26. The normal retirement age for teachers in schools, colleges and universities should be made 60 years with provision for extension up to 65 years.

27. A more equitable system of investing provident fund amount should be devised.

28. Conditions of Work and Service. The conditions of work in educational institutions should be such as to enable teachers to function at their highest level of efficiency.

29. The minimum facilities required for efficient work should be provided to all educational institutions. Adequate facilities for professional advancement should be provided.

30. In fixing the hours of work not only actual class-room teaching but all other work a teacher has to do should be taken into consideration.

31. A scheme should also be drawn up under which every teacher will get a concessional railway pass to any part of India once in five years.

32. New conduct and discipline rules suitable for the teaching profession should be framed for teachers in government service.

33. In private schools the principle of parity should be adopted and terms and conditions of service of teachers in these should be the same as for government schools.

34. Every effort should be made to increase residential accommodation for teachers in rural areas. A programme of building construction and grant of adequate house rent allowance in all big cities should be adopted; co-operating housing schemes for teachers should be encouraged and loans on favourable terms for construction of houses should be made available.

35. The target to be reached over the next 15 years in universities and colleges should be to provide residential accommodation to about 50 per cent teachers in the university and 20 per cent in all affiliated colleges.

36. Special coaching for children who need it, should be provided on an institutional basis and the teachers concerned adequately remunerated.

37. At the University stage, part-time consultancy or additional work, such as research, by teachers in higher education should be permitted ; and no payment should be required to be made to the institution if the earnings do not exceed 50 per cent of the salary.

38. Teachers should be free to exercise all civic rights and should be eligible for public office at the local, district, State or national level. No legal restriction should be placed on their participation in elections, but when they do so, they should be expected to proceed on leave.

39. The employment of women teachers should be encouraged at all stages and in all sectors of education ; opportunities for part-time employment be provided on a large-scale.

40. Provision should be made for residential accommodation particularly in rural areas.

41. The condensed courses for adult women operated by the Central Social Welfare Board should be expanded.

42. Increasing facilities be provided for correspondence courses.

43. Whatever necessary, special allowances should be given to women teachers working in rural areas.

44. **Teachers for Tribal Areas.** Teachers for tribal areas should be given special allowances, assistance for the education of their children and residential accommodation. Provision should be made for special training of teachers going to work in rural areas.

45. **Teachers' Organisations.** Professional organisations of teachers which carry out work for the improvement of the profession and of education should be recognised by the Central and State Governments and consulted on matters relating to school education, general and professional education of teachers and their salaries and conditions of work.

46. Joint Teachers' Councils should be constituted in each State and Union Territory to discuss all matter relating to teachers' salaries, conditions of work and service and welfare service.

47. **National Awards.** The Ministry of Education should consider the suggestions :

(a) to increase the number of national awards ;

(b) to strengthen the selection committee ;

(c) to give travelling allowance to the awardees as for Class I Officers of Government.

What Others Think about these Recommendations

Teachers' Magna Carta. Mr. Chagla described the recommendation relating to salaries as the teachers' magna carta. "I only hope we will able to implement the recommendation," he added.

(*Deccan Chronicle, June 30, 1966*)

Reasonable Scales for Teachers (*National Solidarity, 7th July, 1966*). "The Commission has suggested reasonable scales of emoluments for teachers at all levels. A sound educational system cannot be built with perpetually unsatisfied teachers. They must get their minimum economic remuneration and status. Good teaching should also be supplemented by a streamlined administrative set-up for education."

"In all systems of education the teacher occupies a central place. The system may be perfect as a piece of mechanism with all parts well integrated. But whether it works well or ill depends ultimately on the morale of the teachers who are incharge of the mechanism. This has been recognised by Dr. Kothari's Commission and the recommendations made by it in respect of the salaries of teachers of all grades and the civic rights they should enjoy go a long way in improving their morale. They give a guarantee that institutions will have a superior quality of teachers, superior not only in respect of their general and professional qualifications but also of the zeal and enthusiasm with which they will work."

(*The Educational India, July 1966*)

"In the last analysis the quality of education must necessarily depend on the quality of teachers and it is simply not possible to get the right type of teachers in sufficient numbers if they continue to be paid miserably low salaries. The Commission's recommendations on this question deserve to be accepted and implemented without delay."

(*The Indian Express, July 1, 1966*)

Fair Deal for Teachers (*The Tribune, July 1, 1966*). "This expansion in demand for education supposes a corresponding increase in the number of teachers and the Commission proposes not only to retain those who are already in but also to draw larger number to the profession with better salaries both in government and non-government institutions—increased expenditure is to be met with generous subsidies. While current salaries at the college and university stage are, in many cases not materially different from those proposed, the Commission's recommendations for school teachers—the weakest link in the chain—do constitute a fair deal for them. What is even better is the recommendation so that teachers' salaries would be subject to review every five years so that they do not suffer because of any material rise in the cost of living."

Improvement in Teachers' Salary Rightly Emphasised. Discussing the pay scales of the teachers, Dr. D. S. Reddi, Vice-Chancellor of the Osmania University remarked : "The improvement in the salary scales of teachers has quite rightly been emphasised as being

basis for the progress. It is important that the best talent should be attracted for the teaching profession. To what extent this can be achieved remains to be seen, for no State can find funds from its own resources. By and large, it would appear as if parity of pay has been recommended irrespective of the nature of the employer on the principle of equal pay for equal work. It is however a little disappointing that a deviation from this principle has been made in respect of one or two categories of teachers."

(*Deccan Chronicle, July 17, 1966*)

An attempt to give the Teachers Some Hope of a Better Life. (*The Hindu, July 1, 1966*). "The Commission has rightly held that schools and colleges will go downhill unless they are properly staffed and it is no accident that its recommendations for better scales of pay have hit the headlines of the Press. This is not to say that the scales suggested are princely or that the profession of teaching will henceforward attract the best talent in the country. But the scales offered are an attempt to give the trained teacher some hope of a better life. The cost will, of course, be astronomical and it is not clear where the funds are to come from. The improvement of school buildings and equipment, which are also essential, will prove equally expensive."

A Bold Act. "It has acted boldly in recommending higher pay for teachers of all categories with a promise to review their pay position after every five years and by linking their D.A. with those in Government service.

Realistic Approach. Thus the approach of the Commission has been realistic. It has realised the virtual absence of difference between a school teacher and a college teacher with post-graduate degrees and has prescribed the same scale of pay for both.

(*Hindustan Standard, June 12, 1966*)

Public Schools

British Origin. The system of public schools largely reserved for those who have the capacity to pay high fees was transplanted in India by the British administrators for educating their children.

Four Types of Public Schools. (1) Schools which were once intended for European and Anglo-Indian children. These schools were established at Simla and Darjeeling. (2) Schools which were once meant for the princely families. Mayo College Ajmer, Rajkumar colleges at Rajpur and Raipur come under this category. (3) Schools which once catered to the needs of children of military personnel. Lawrence Schools at Sanawar and Lovedale may be placed in this category. (4) Schools which have been started by public trust or individuals for the education of the children of the well-to-do class. The Delhi Public School and the Delhi Modern Schools come under this type.

Characteristics of a Public School.—According to the Indian Public Schools Conference a public school should satisfy the following conditions :—

1. It is intended mainly for Indian boys.
2. It accepts the general principle that a boy otherwise suitable shall not be excluded from admission on the ground that he does not belong to any particular class or creed.
3. It accepts the general principle that all boys admitted shall be treated alike and to this end will arrange that all boys shall join a common mess and will not allow any boarder to have a private guardian, tutor or servant, or to live anywhere else except in one of the school boarding houses.
4. It has an effective governing body to the meetings of which the Headmaster has the right to attend.
5. It is financially stable and agrees to send annually a copy of its audited balance sheet and statement of accounts to the Honorary secretary of the Conference.

6. It provides adequate salaries and satisfactory conditions of service for the members of its staff.
7. It possesses adequate buildings, equipment and playing fields.
8. It provides a course of study extending over at least five academic years beyond the age of 11.
9. It regularly prepares and enters a reasonable number of candidates for a public examination of the standard of the Cambridge School Certificate and provides facilities for education beyond this stage.
10. It gives boys opportunities for social service and training in leadership and responsibility.
11. It provides regular organised games and physical training for all boys.
12. It gives adequate attention to and provides equipment for out-of-school activities other than games.
13. It provides for adequate medical inspection and remedial treatment.

About the English Public Schools Kurt Hahn states :

"They instil fairness in anger, coolness in danger, grace in defeat, readiness for service at all times. They best emerge from our traditional institutions, knowing how to argue without quarrelling, how to quarrel without suspecting, how to suspect without slandering."

These schools will form part of our educational system for the present and as such must be brought in conformity with the general national pattern of education.

Prof. Humayun Kabir gives the following features of the public schools :—

- (a) They are generally founded by a private individual or organisation.
- (b) These schools are invariably residential.
- (c) They draw their pupils from the most fortunate section of the public.
- (d) With greater resources and freedom, they lay great stress on the development of qualities of leadership and are able to provide greater facilities for their pupils.

Dr. K. L. Shrimali at the 20th Annual Meeting of the Indian Public Schools Headmasters' Conference observed, "Nobody denies that public schools in this country provide good education. Boys who come out of these schools have poise and self-confidence, qualities which are greatly needed in our public life. These schools

provide facilities for physical education and games, character training and intellectual development which we would like to introduce in ordinary schools also. In matters of educational standards too, these schools leave little to be desired and we would like all our schools, to strive to attain the same standards."

Prof. Humayun Kabir thinks that these public schools have an important place in the educational ladder of the country provided (1) They conform to the pattern of Indian life and considerably simplify the customs of the schools life. (2) They steadily draw closer to the general educational system of the country without losing their special merit. (3) They take steps to bring down the cost of education while maintaining their special features and quality. (4) They become the visible symbols of the principle that the role of education is the equalisation of opportunity within the community.

With a view to giving an opportunity to the students of the parents belonging to low income groups to study in these schools, the Government of India has started a scheme of awarding scholarships.

Public Schools and the Future. Dr. Shrimali suggested at the Conference that the Public Schools must fit into the national system and for this purpose he made the following suggestions :—

1. The cost of education in these schools must be reduced.
2. They should adopt Hindi as the medium of instruction.
3. These schools should provide education for such leadership as will aim at the all-round development of society as a whole.
4. These schools should serve the interests of the society as a whole and not of any one particular section.

To Hell with Public Schools. Ashok Celly in an article under the above caption in '*The Hindustan Times*' dated 16 April 1972 argued that they are out of place in a socialist India. A legacy of its colonial past they are doing more harm than good to the country, they compel students to concentrate on cramming, alienate them from the community to which they belong, emphasise values that are vulgar and produce conformists in the worst sense of the word.

A Waste of Vital Resources. Principal Baljit Malik of the Vidya Bhavan, Udaipur, in an article in '*The Hindustan Times*' dated May 21, 1972 criticised the public school on the following grounds.

Unsound Prefectorial System

"The most backward, the unpsychologically unsounded feature of these schools is the hierarchical authority structure supported by the PREFCTORIAL SYSTEM. This is a structure that accentuates the

personality cult—not only of the principal, but also of adolescent prefects who come to be glorified, ideolised and invested with super-powers at a stage in life when they are experiencing their most sensitive problems of growing up. In a public school where life is formal, where emotion is always repressed, where the stiff upper lip is the most respected public posture, where freedom is a four-letter word—the prefects are the guardians of morality ; it is they who deal at the grass-root level with problems of loyalty between individuals, lying and stealing, bullying and intimidating, friendship and homosexuality. The entire grass-root world is a world of “evil” for the public school headmaster and his colleagues—a world either left to the adolescent prefects or dealt with through vigorous forms of punishment.”

Medieval Values

“Changing the language of these schools without upsetting their medieval value system will achieve little. It is their value system that needs upsetting ; a system based on the divine right of the “leaders” within the school hierarchy—leaders always nominated, never chosen by the community. Leaders in uniform engaged in a perpetual salute to authority, engaged in perpetual deference to the stages of power derived from the principal who derives his own powers over the kingdom of the young from governing body’s invariably composed of money-spinning business men.”

Expensive and Authoritarian

“The public schools are expensive, they are authoritarian, their system is too competitive and their aim too conventional—they are schools that produce delicately mannered, suavely or modestly dressed conforming young men and women who become faithful defenders of the status quo.”

A Significant Contribution. Principal H. L. Dutt of the Colvin Taluqdars’ college pointed out the following features of the public schools in an article in ‘*The Hindustan Times*’ dated 21 May, 1972.

Contribution to Public Life

The public school boy, I hope, does his best in the walk of life he enters. He may or may not succeed. But considering the very small number of public schools in the country, their contribution in all fields is significant. Their products are scientists doctors, teachers, artists, social workers, members of legislatures, ministers, and what have you. After all boys are boys and we in public schools hope that we equip our boys to play a useful part in society. One must always remember that human nature aspires to move up, and it reckons its movement upwards in the light of its own abilities and aspirations.

Better Teachers and Better Students

A teacher in a public school must not be one who has taken to teaching as a last resort. If he is to give of his best he must have

faith in his profession and take to it because he has a natural aptitude for it.

Because of the better atmosphere in a public school a teacher finds it more conducive to his calling, and takes more interest in his work. The boy is proud of his school because of what it has done for him, and he is grateful and loyal to his old school. This feeling which he expresses in his better personality is unfortunately denounced as snobbery. I suppose if one is proud of one's country one is liable to being mistaken for a snob by such critics.

Dr. Zakir Husain on the Useful Role of Public Schools in India

Speaking at the Thirtieth Session of the Indian Public Schools Conference held at the Modern School, New Delhi, in February 1968, he observed "I would like the institutions which belong to this Conference to be distinct by three important features, namely (1) all-India character and significant contribution to national integration ; (2) progressive outlook and leadership in educational experimentation ; and (3) maintenance of good standards."

Features of Public Schools. Dr. Zakir Husain remarked : "The Public Schools in India, which now include Sainik Schools also, have a number of commendable features. They all strive to impart good education and to maintain standards. Their emphasis is on providing an all-round education which, in addition to the usual curriculum of general education, includes a welcome emphasis on the development of skills in using hands, on art education and especially on physical education, games and sports. They are all well equipped with adequate buildings and playgrounds which are large enough to allow about half the enrolment to be on the play-field at the same time. They give good salaries to teachers and maintain a good teacher-pupil ratio. The authority of their headmasters is respected and well maintained. I regard them as a group of good institutions of quality. I also attach great significance to their being an all-India group with close relationships between themselves and I value their all-India character as most of them get students from several parts of the country."

Future of Public Schools. "The situation in the country has changed very rapidly during the last twenty years and will undergo very great changes in the years ahead. The public schools cannot remain unaffected in the changing social environment. For their development and even for their survival, they will have to move with the times and for this purpose, two major steps are necessary. The first is that the public schools must strive to become a part of the national system of education and contribute to its development rather than stand out in a glorified but ivory-tower isolation."

"While people generally appreciate the good features of the public schools, we must also understand that there are certain weaknesses in the existing system which invite comment, criticism and even hostility. Quality of education is a very desirable goal no

doubt. But it should not be too exclusive, too costly and too closely allied to privilege. It is these aspects of your institutions that, in my opinion, deserve close consideration at your hands."

Removal of Exclusiveness. "Let me first take the point about exclusiveness. The number of your members is very small at present, about 40. It is also growing very slowly. May I suggest, for your consideration that you might think of a policy of enlarging your membership? I do not suggest that you should lower standards. But certainly, the number of even the finest schools in the country cannot be so small as your membership would indicate. You may, therefore consider whether it would not be desirable to enlarge your membership in some way or the other so that some of the best schools in the country may become your members. Your membership should be open to a school teaching through any Indian language as medium. The conditions of membership could be suitably modified in minor essentials so that, without lowering the overall standards, it would still be possible to bring in more first-rate institutions within your membership and thereby enlarge the sphere of your influences."

Reduction in Costs. "I have one suggestion to make for your consideration regarding costs. I do realise that good education will cost more and that education in public schools will always remain at a much higher level than that in the common schools. But I would like this difference to be reduced to the extent possible. On the one hand, the expenditure on the common schools will have to be considerably upgraded. This is a task for the State to undertake. On the other hand, the costs of the Public Schools will have to be reduced and this is a point for you to consider. It may be possible to cut down some ostentatious expenditure which is not really relevant to the maintenance of standards. But what is even more important is that desirability of admitting day scholars will have two advantages. First, the facilities of education in public schools will be available to a large number of families who do not desire or need to place their children in hostels. Secondly, the cost per student will go down considerably as the proportion of day scholars increases. This is a reform which is long overdue and I commend it for your consideration."

Scholarships for Talented Students. "The third point is even more important. Barring a very small minority of scholarship-holders, the vast bulk of your students now comes from the privileged group, in the most impressionable period of their life which is not good either for them or for the country. It is not good for them because through this isolation, they lose the ennobling emotional education which mixing with children from all social strata will bring. It is not good for the country because this segregation between the rich and the poor weakens social cohesion and national integration. It is therefore very necessary to take early steps to end this undesirable segregation which now takes place in institutions of this type. I would, therefore, request you to consider the desirability

and the possibility of instituting a certain proportion of scholarships to talented students who do not have the financial means to join your institutions. You will recall that the Government Resolution on the National Policy on Education highlighted this issue and recommended that "special schools, like public schools, should provide a prescribed proportion of free studentships to prevent segregation of social classes." I regard this as a very important recommendation and would request you to implement it as quickly and as largely as possible."

Resolutions Passed by the 30th Session of the Indian Public Schools Conference, New Delhi (Feb. 1968)

1. Scope of Membership to be widened. With a view to playing more significant role in the national system of education and to helping in the improvement of standards, the conference should expand the scope of its membership and should consider, as a first step, the association of more independent schools with I.P.S.C. and resolves that to that end, a study group be appointed to determine the criteria which should govern the admission of other schools to the status of associates and to amend accordingly the present terms of membership.

2. Cost to be Kept Low. The Conference is unanimously of the view that every endeavour should be made to make it possible for a wider public to avail itself of education at its schools and having discussed the financial implications of this in depth, resolves that member-schools take all measures, compatible with the maintenance of standards, to keep costs as low as possible and to find ways and means of instituting scholarships on the basis of a means and merit test, the following pattern being suggested (a) 2 to 5 per cent of school strength as boarders, and (b) 3 to 10 per cent as day-boarders;

3. Present Medium to Continue. The I.P.S.C. discussed the question of the place of English and Indian languages in Conference schools and resolves that member schools which find it necessary, for pragmatic reasons, to keep to their present medium or media of instruction, could continue to do so until such time as it will be practicable for them to change. They also resolve that their efforts to improve techniques of teaching Indian languages should be intensified.

4. Experiments in Education. The I.P.S.C. reviewed the work done by some of its members in the field of experimentation in education and resolves that the awareness of the progressive methods of teaching, and establishing and adopting these to our needs, and establishing new norms is commendable so that we continue to improve the quality of education imparted in our schools.

5. The Conference considered the desirability or otherwise of retaining the word 'Public' with its name. Although the consensus

of the opinion was to drop it, it was resolved to retain it for the present and consider this matter again at the next meeting.

Education Commission Criticises Public School System. The Commission has spoken of these institutions in scathing terms. The System of schools largely reserved for those who have the capacity to pay high fees, "was transplanted in India by British administrators and we have clung to it so long because it happened to be in tune with the traditional hierarchical structure of our society". The Commission has regrettably noted that "what is worse, this segregation is increasing and tending to widen the gulf between the classes and the masses".

This undemocratic feature of the Indian school system has been described by the Commission as one of the major weaknesses of the present educational structure. The children of the masses are compelled to receive sub-standard education and, as the programme of scholarships is not very large, sometimes even the ablest among them are unable to find access to such good schools as exist, while the economically privileged parents are able to "buy good education for their children".

The Commission has stated that whatever the past history of the so-called public schools, they have "no valid place in the new democratic and socialistic society we desire to create".

It has pointed out with approval to the educational system built up by the Soviet Union (one of the major factors which has contributed to its progress) and also the system developed in the U.S.A., France and the Scandinavian countries.

Further, the Commission has pointed out that recently the so-called public schools have come in for strong criticism in England itself and it is not unlikely that a radical change may be initiated to make them more democratic.

The Commission has emphasised that India must move towards the goal of a common school system which will be open to all children irrespective of caste, creed, community, religion, economic condition or social status; where access to good education will depend not on wealth or class but on talent and in which no tuition fee will be charged.

One of the ways suggested by the Commission for the easy adoption of the common school system is the "neighbourhood school" concept under which all children without exception must go to the nearest school.

Compulsory social and national service for all students has been recommended by the Commission as an antidote to the "temptation to become a parasitical group living for itself and perpetuating its own privileged position".

The Study of Languages and Three Language Formula

Evolution of the Language Policy. The Education Commission stressed its importance as, "The development of a proper language policy can also assist materially in social and national integration. Of the many problems which the country has faced since Independence, the language question has been one of the most complex and intractable and it still continues to be so. Its early and satisfactory solution is imperative for a variety of reasons—educational, cultural and the political."

Development of Modern Indian Languages. The Commission felt, "It is hardly necessary to emphasise that the development of the Indian languages is both urgent and essential for the development of the Indian people and as a way of bringing together the elite and the masses. It can make scientific and technical knowledge more easily accessible to people in their own languages and thus help not only in the progress of industrialisation but also in the wider dissemination of science and a scientific outlook. Energetic action is needed to produce books and literature, particularly scientific and technical in the regional languages. This should be regarded as a specific and imperative responsibility of the universities and the UGC should provide not only general guidance but also allot adequate funds for the purpose."

Medium of Education at Schools and Colleges. The Commission stated, "The development of the modern Indian languages is inextricably linked up with the place given to them in the educational system specially at the university stage. The medium selected should enable students to acquire knowledge with facility, to express themselves with clarity and to think with precision and vigour. From this point of view, the claims of the mother-tongue are pre-eminent."

"Learning through a foreign medium compels the students to concentrate on cramming instead of mastering the subject matter.

Moreover, as a matter of sound educational policy, the medium of education in school and higher education should generally be the same. Prior to 1937, the position was at least consistent. English was the medium both in the upper stages of school and in college education. As we have rightly adopted the regional languages as the media of education at the school stage, it follows logically that we should adopt them increasingly at the higher stage also."

This proposal may also be supported strongly as a measure to promote social and national integration.

Is it Possible to have a Single Medium of Education at the University Stage? The Commission wrote about this : "It has been sometimes argued that there should be a single medium of education at the university stage—English for the time being, to be ultimately substituted by Hindi—on the ground that it would promote mobility of teachers and students from one part of the country to another, provide for easy communication between academic and professional men and administrators, further intellectual cooperation amongst the universities and help in other ways in developing a corporate intellectual life in the country. We are inclined to think, on a balance of considerations, that this solution is not feasible. In practice, it will probably mean the indefinite continuance of English as the only medium of education—a development that we cannot support in the larger interests of the country. The adoption of Hindi as a common medium of education in higher education in all parts of India is not possible for some years to come and, in non-Hindi areas, it will still have some of the disadvantages associated with the use of a foreign medium and is likely to be resisted. It would, therefore, be unwise to strive to reverse the present trend for the adoption of the regional languages as media of education at the university stage and to insist on the use of a common medium in higher education throughout the country."

In view of the importance of the problem, the Commission suggests that the UGC and the universities carefully work out a feasible programme suitable for each university or group of universities.

The change over should take place as early as possible and, in any case, within about ten years, since the problem will only become more complex and difficult with the passage of time.

A large programme of producing the needed literature in the Indian languages will have to be made for the training and retraining of teachers. Suitable safeguards should be devised, in the transitional stage, to prevent any lowering of standards during the process of change-over because of inadequate preparation. "But while we proceed with caution, we would do well to remember that careful action does not mean vacillation, or tardy action, or no action at all. Caution is meaningful only if it is part of a policy of determined, deliberate and vigorous action."

English as the Medium in All-India Institutions. There will,

however, be one important exception to this general rule, namely, All-India Institutions which admit, in considerable numbers, students from different parts of the country. These now use English as the medium of education, which should continue undisturbed for the time being.

Change-over to Hindi in these Institutions under two Conditions. The first is the effective development of Hindi as a medium of education at this level. This is a matter which can be left to the UGC and the institution concerned to decide.

The second is the equally important political consideration that in such a change-over, the chances of students from non-Hindi areas should not be adversely affected and that the proposal should have the support of the non-Hindi States.

Simultaneously, it is necessary to make the regional languages the official languages of the regions concerned as early as possible so that higher services are not *de facto* barred to those who study in the regional medium.

Channel of International Communication. English would be the most useful library language in higher education and our most significant window on the world.

It is also important to encourage the study of other foreign languages on a more extensive scale for a variety of academic and practical purposes.

Russian has a special significance for the study of science and technology in the present day world.

In addition, French, German, Japanese, Spanish and Chinese are important world languages of communication and for acquiring knowledge and culture. All universities, some selected colleges, and also a small proportion of carefully selected schools should provide for the teaching of these languages. The knowledge of another foreign language (especially Russian) besides English should be a requirement for a doctorate degree, and in certain subjects, even for the Masters' degree.

Hindi as the Link Language. The Commission observed : "It is, however, equally obvious that English cannot serve as the link language for the majority of the people. It is only Hindi which can and should take this place in due course. As it is the official language of the Union and the link language of the people, all measures should be adopted to spread it in the non-Hindi areas. The success of this programme will largely depend on the extent to which it is voluntarily accepted by the people of these areas."

Multiple Channels of the Inter-State Communication. "In addition to Hindi, it is essential to provide multiple channels of Inter-State communication in all modern Indian languages. In every linguistic region, there should be a number of persons who know all

the other modern Indian languages and some who are familiar with their literatures and able to contribute to them." For this purpose, the Commission recommended :—

Adequate arrangements should be made both in schools and colleges, for teaching different modern Indian languages.

In addition, steps should be taken to establish strong departments in some of the modern Indian languages in every university.

It may also be available to create a small number of special institutions (or advanced centres) for the comparative study of different languages and their linguistic problems.

At the B.A. and M.A. levels, it should be possible to combine two modern Indian languages. This will incidentally supply the bilingual persons needed for language teaching in schools and colleges.

The School Curriculum

The Commission recommended broad areas of curricular studies for the different sub-stages, as under :—

1. Lower Primary Stage (Classes I—IV)

- (a) One language—the mother tongue or regional language.
- (b) Mathematics.
- (c) Study of Environment (covering Science and Social Studies in Classes III and IV).
- (d) Creative Activities.
- (e) Work Experience and Social Service.
- (f) Health Education.

2. Higher Primary Stage (Classes V—VII)

- (a) Two languages—(i) the mother tongue or the regional language and (ii) Hindi or English.

Note. A third language (English, Hindi or the regional language) may be studied on an optional basis.

- (b) Mathematics.
- (c) Science.
- (d) Social Studies (or History, Geography and Civics).
- (e) Art.
- (f) Work Experience and Social Service.
- (g) Physical Education.
- (h) Education in Moral and Spiritual Values.

3. Lower Secondary Stage (Classes VIII—X)

- (a) Three languages. In non-Hindi speaking areas, these

languages will normally be, (i) the mother tongue or the regional language, (ii) Hindi at a higher or a lower level, (iii) English at a higher or a lower level. In Hindi speaking areas, they will normally be (i) the mother tongue or the regional language, (ii) English (or Hindi, if English has already been taken as the mother tongue), and (iii) a modern Indian language other than Hindi.

Note. A classical language may be studied in addition to the above three languages on an optional basis.

- (b) Mathematics.
- (c) Science.
- (d) History, Geography and Civics.
- (e) Art.
- (f) Work Experience and Social Service.
- (g) Physical Education.
- (h) Education in Moral and Spiritual Values.

Basis for a Workable Three-Language Formula

After tracing the origin of the three-language formula and the difficulties experienced, the Commission suggested that the following guiding principles would help in evolving a *workable* three-language formula in schools :—

1. Hindi is the official language of the Union and is expected in due course of time to become the *lingua franca* of the country. Its ultimate importance in the language curriculum will be second only to that of the mother tongue.
2. English will continue to enjoy a high status so long as it remains the principal medium of education at the university stage, and the language of administration at the Centre and in many of States. Even after the regional languages become media in higher education in the universities, a working knowledge of English will be a valuable asset for all students and a reasonable proficiency in the language will be necessary for those who proceed to the university.
3. The degree of proficiency that can be acquired in learning a language at school depends not only on the number of years during which it is learnt but also on the motivation of the student, the stage at which it is studied, the types of teachers and equipment provided and the methods of teaching adopted. A short period under favourable conditions might achieve better results than a longer period without proper facilities. While arguments can be advanced for introducing a child to a second language at a very early age, the provision of qualified and competent teachers for teaching the language to millions of children in our primary schools would be a very formidable task.

4. The most suitable stage for making the learning of three languages compulsory appears to be the lower secondary stage (Classes VIII—X) where smaller numbers of pupils are involved and better facilities and teaching personnel can be provided. It is also desirable to stagger the introduction of two additional languages so that one is started at the higher primary stage and the other at the lower secondary stage, after the first additional language has been mastered to some extent. In a good school, these years of compulsory study would probably be adequate for gaining a working knowledge of the third language ; but arrangements should be made for its study for a longer period on an optional basis.

5. The stage at which Hindi or English should be introduced on a compulsory basis as a second language and the period for which it should be taught will depend on local motivation and need, and should be left to the discretion of each State.

6. At no stage should the learning of four languages be made compulsory, but provision should be available for the study of four or even more languages on a voluntary basis

Modified Three-Language Formula to include :

- (a) The mother tongue or the regional language ;
- (b) The official language of the Union or the associate official language of the Union so long as it exists ; and
- (c) A modern Indian and Foreign Language not covered under (a) and (b) and other than that used as the medium of instruction.

Implications of the Modified Formula : Lower Primary Stage. "At the lower primary stage only one language should be studied compulsorily—the mother tongue or the regional language, at the option of the pupil. In the case of the vast majority of pupils, the language of study at this stage will be the regional language which will also be their mother tongue. Some children belonging to the linguistic minorities may also opt for instruction in the regional language, because of its great advantages ; but this cannot be forced on them, and they have the right under the Constitution to have facilities provided for their primary education through their mother tongues. The State Governments should, therefore, provide primary schools teaching through the mother tongue for the children of linguistic minorities if they desire to have such an education, subject to the usual condition approved by the Education Ministers' Conference (1949) that the minimum number of such children should be 10 in a class or 40 in a school. It is desirable that such children should have a working knowledge of the regional language also. Facilities for its study should, therefore, be provided, on an optional basis, from Class III onwards. We do not favour making the study of regional language compulsory at this stage for children of linguistic

minorities, as has been done in some States at present. We also are not in favour of teaching English as a second language at this stage.

Higher Primary Stage. At the higher primary stage only two languages should be studied on a compulsory basis : (i) the mother tongue or the regional language, and (ii) the official or the associate official language of the Union. For almost all the pupils in the Hindi areas and for a majority of them in the non-Hindi areas, English will probably be the second language, but a large proportion of the pupils in non-Hindi areas may also opt for Hindi. In addition, facilities should be provided for the study of a third language on an optional basis, so that the children in Hindi areas whose mother-tongue is not Hindi and the children in non-Hindi areas who have taken English as the second language may study the official language of the Union, if they so desire.

Lower Secondary Stage. At the lower secondary stage (Classes VIII—X), a study of three languages should be obligatory, and a student should be under an obligation to study either the official language of the Union or the associate official language which he had *not* elected at the higher primary stage. By and large, the pupils in the Hindi areas will study Hindi, English and a modern Indian language, while the vast majority of pupils in non-Hindi areas will learn the regional language, Hindi and English. In the selection of the modern Indian language in Hindi speaking areas, the criterion should be the motivation of the pupils for studying that language. For instance, in the border areas of a State, people are generally interested in studying the regional language across the border and this could well be the third language to be studied.

It is true that English will be the most important library language to be studied at this stage. We, however, think that it is also necessary to encourage the study of other important library languages like Russian, German, French, Spanish, Chinese or Japanese. Facilities for their study should be provided in a few selected schools in each State and it should be open to the students to study them, either in addition to, or in lieu of English or Hindi. Similarly, provision should be made in a few selected schools in the non-Hindi areas, for the study of modern Indian languages other than Hindi and the regional language. It should be open to the students to study these languages, as stated earlier with regard to literary languages, either in addition to or in lieu of either English or Hindi.

Higher Secondary Classes. In the higher secondary classes which serve largely as a preparatory stage for higher education, only two languages need be made compulsory and the students should have the option to select say two of the three languages studied earlier or a combination of any two languages taken from the following groups : (1) modern Indian languages ; (2) modern foreign languages ; classical languages—Indian and foreign. There is of course no bar

to a student studying one or more additional languages on an optional basis.

Position of the Official Language in the Formula. The three-language formula as modified above is elastic and more likely to meet the varied linguistic needs of the people rather than the rigid approaches which are commonly adopted. For instance :

1. A study of English and Hindi in our proposal, would be indicated, not in terms of years of study, but in terms of hours of study and the level of attainment. There would be two prescribed levels of attainment in each of these languages—one for those who study it for a period of three years and the other for those who study it for a period of six years.

2. For most children completing lower secondary stage, two of the three languages learnt will be Hindi and English—the two link languages of the country which function as instruments of national and social integration. Some need only a working knowledge of Hindi or English, while others require a greater proficiency in them. The flexible curriculum which we have proposed would cater for these separate needs.

3. Although English would be the most important library language to be studied, a certain number of students will study a library language other than English in all parts of the country.

4. In every linguistic region, there will be a certain number of students studying other modern Indian languages and thereby opening up multiple channels of internal communication.

This elastic approach to the language problem, it is hoped, will promote a better cultural communication between the different linguistic groups in the country and promote a better international understanding.

Three-Language Formula at the University Stage. The Commission is of the view that this would place a heavy language load on students and lead to a waste of scarce resources and deterioration of standards of subject knowledge in higher education. The study of two languages only should be compulsory at the higher secondary stage. In higher education, the study of a language should not be compulsory.

Study of Hindi. "Although in the modified three-language formula recommended by us, a certain proportion of students may not study Hindi as a second or third language, beyond a period of three years, we would like to lay the utmost stress on the importance of the study of the language and the necessity of organising nationwide programme for promoting such study on a voluntary basis. As Hindi is the link language among the masses, it is necessary that every person should have at least a working knowledge of Hindi as a channel of internal communication in all parts of India and that those

who will have to use it as the official language either at the Centre or in the States acquire a much higher proficiency in it. But in our opinion, the cause of Hindi, and also of national integration, would be better served if its study beyond a certain point is not forced on unwilling section of the people. We have no doubt that boys and girls will study Hindi more intensively if there is adequate motivation. This motivation largely depends on the extent to which Hindi becomes in effect a language of administration. It is also related to the manner in which Hindi develops and becomes enriched so that people in non-Hindi areas may turn to it for knowledge and cultural nourishment."

International Numerals. The numerals now taught in schools vary from language to language. We recommend that all modern Indian languages should adopt the international numerals which, in a way, are really Indian in origin. This is a simple reform which will lead to great convenience.

Study of English. In view of the importance of English for long time to come, to continue as 'library language' in the field of higher education, a strong foundation in the language will have to be laid at the school stage. The Commission recommended that its teaching may begin in class V, but it also realised that for many pupils, particularly in the rural areas, its study will not commence before Class VIII.

The Study of Classical Languages. We recognise the importance of the study of classical languages and of the special claim that Sanskrit has on the national system of education. But we do not agree with the proposal to include Sanskrit or other classical languages in the three-languages formula. In our opinion, this formula has to be restricted to the modern Indian languages only. We are in favour of the proposal of adopting a combined course of the mother-tongue and Sanskrit. But this is not a very popular proposal. Under these circumstances classical languages can be provided in the school curriculum on an optional basis only. This may be done from Class VIII onwards.

The Three-Language Formula—How it will Operate in Different Classes. The following is the summary of the Recommendations of the Education Commission on the Three-language Formula :

<i>Classes I—IV</i>	The study of only one language should be compulsory. It will naturally be mother tongue.
<i>Classes V—VIII</i>	The study of two languages should be compulsory at this stage. The second language may be either the official language of the Union (Hindi) or the associate official language of the Union (English), so long as it is thus recognised.
<i>Classes IX—X</i>	The study of three languages should be obligatory at this stage and one of these three languages should be the

official language of the Union or the associate official language whichever was *not* taken up in classes V—VIII.

Classes XI—XII The study of two languages should be compulsory.

General Observations

A Pragmatic Approach (*National Solidarity, July 7, 1966*). "The Commission has suggested a more pragmatic three-language formula which should serve as a practical basis of compromise on various schools of thought on this vexed question. Mother tongue as the medium of instruction up to University standard (providing a ten-year transitional period for change-over in the present Universities), and compulsory teaching of either Hindi or English and one more language, either a modern Indian language other than regional language serving as medium of education or a European language."

Language Formula Welcomed (*Educational India, July 1966*), "The Commission has also given a clear lead in regard to the language controversy. It has laid down that within ten years the regional language should become the media of instruction at all levels including the University stage. It has also recommended that for the time being English should be the link language and that as such it should be taught from an early stage. It has also suggested modifications in the adoption of the three language formula by saying that Hindi should not be made a subject of compulsory study in non-Hindi areas. This should give satisfaction to the people of the South who have been opposed to the compulsory imposition of Hindi. All the same the Commission is also clear on the view that English cannot continue to be a link language for all time to come and that sooner or later it should be replaced by Hindi."

A Balance Struck. "The controversial part of the report is that dealing with the language question. Here again the attempt, perhaps inevitably is to strike a balance between the vehement opposition to Hindi in certain areas and the need to evolve a national language to ensure national integration in the long run. The suggestion that the regional language should be the medium of instruction at school as well as at the higher stage is unexceptionable. In respect of all-India institutions English will continue with eventual adoption of Hindi as the aim. But whether the positive provision for promotion of teaching of English "right from the school stage" simultaneously with the pious wish that "all measures should be adopted" to spread Hindi in the non-Hindi areas, will bring about the desired result must remain open to question. However, the Commission's approach to elevation of standard without attempting to aggravate mutual suspicions is perhaps the best in the prevailing circumstances."

(*The Patriot, July 2, 1966*)

Commission Deserves Congratulations on Upholding the Claim of Mother-Tongue. Shri Badlu Ram Gupta, an educationist and ex-legislator from Punjab, states—

"The Commission also deserves congratulations for upholding the claim of the mother-tongue as the best suited medium of instruction at all levels of education. It is a universally accepted principle of a sound educational system that the ends of education are served best when it is imparted through the mother-tongue of the student. The Commission has cut the Gordian knot by fixing a ten-year period for change-over from English to regional languages."

(*The Hindustan Times*, July 7, 1966)

The Language Question Handled Tactfully (*Times of India in an Editorial supported the Commission's Recommendations*). "No issue in the field of education is so charged with emotion as the one concerning the place of languages in the school curriculum. The Education Commission has been careful to handle it with the utmost tact. The only pragmatic course for the Commission in this situation was to search for a formula which, while rejecting the principle of compulsion, would in effect induce most students in non-Hindi States to acquire a working knowledge of Hindi."

Original and Significant Contribution. Dr. D. S. Reddy, the Vice-Chancellor of Osmania University commented : "In one respect the Commission has made an original and significant contribution which should satisfy all educationists and that is the modification in the currently accepted three-language formula. The proposal to make the study of Hindi optional rather than compulsory is the most constructive recommendation that is contained in the report and should set at rest all the criticism that the present three language formula has aroused. It is educationally sound and should be accepted even from the point of view of political expediency."

"The suggestion that other world languages could also be used as medium in selected schools and universities has great educational value though I doubt if it would not have been better to have confined this recommendation to schools only."

(*Deccan Chronicle*, July 17, 1966)

Greater Role for Sanskrit Urged (*Patriot*, July 4, 1966). "The Education Commission made a 'serious mistake' by putting Sanskrit on a par with Arabic, Dr. Dev Raj Chanana, an eminent Sanskrit scholar says.

Govind Das for Two Languages (*Patriot*, the 3rd July, 1966). Seth Govind Das, M.P., President of the All-India Hindi Sahitya Sammelan, commenting on the Education Commission's recommendations regarding the three-language formula and the position of English in it, he said : "I do not understand why English should be a compulsory language to be taught to the students. I am not against learning of English or any other language but there should not be any compulsion in this respect. This Commission has recommended a modified three-language formula which in its context meant that it will not be necessary for students to learn Hindi which is constitutionally the official language of the Union. This recom-

mended formula in my view is quite anti-national and against the Constitution."

Mr. Badlu Ram Gupta, an educationist and an ex-legislator, on the Language Formula stated : "But both Hindi and English should be the media of instruction in all-India institutions, not English alone as recommended by the Commission. The country is passing through a stage of bilingualism and Hindi cannot be denied its rightful place in such institutions."

Claim of Hindi Ignored (*The Hindustan Times*, July 7, 1966). "But both Hindi and English should be the media of instruction in all-India institutions, not English alone as recommended by the Commission. The country is passing through a stage of bilingualism and Hindi cannot be denied its rightful place in such institutions.

"The option recommended by the Education Commission between the study of English and Hindi under the three-language formula would in actual practice operate in favour of English and to the disadvantage of Hindi. Since English is today the sole medium for the higher competitive examinations, no student can afford to neglect English. But since Hindi is the principal official language of the Union, proficiency in it is of no secondary importance and is being acquired by students all over the country under the existing provisions of the three-language formula. The change suggested by the Commission would amount to putting the hands of the clock back. The only hope of Hindi ever becoming the *de facto* official language of the Union lies in a concerted effort to promote it as a compulsory subject in schools all over the country. With the introduction of the change envisaged in the Commission's report, the chances of Hindi ever acquiring that status will recede into the background. The present arrangement should, therefore, not be disturbed."

Controversial Recommendations of the Three-Language Formula (*The Indian Express*, July 1, 1966). "The most controversial part of the Commission's report is the one relating to the three-language formula—the suggestion that the formula should be modified so as to enable the student to choose between Hindi and English as one of the three languages he will have to learn at the school stage. This particular recommendation will unnecessarily reopen a continuous issue and place the Government in a very serious political predicament. The present three-language formula was accepted after a great deal of bitterness and with a great deal of reluctance. However, the point surely is that it has been accepted. The matter should have been allowed to rest there, and this would not have prevented the Commission from making positive recommendations for improving the standards of English studies. It must be hoped that the Commission's controversial recommendation on the three-language formula will not distract attention from the valuable proposals which it has made on other aspects of educational policy."

Religious and Moral Education

History of the Problem

1. Pre-British Period. In the Hindu and the Muslim periods the teaching of religion was an essential part of education. It was assumed that the education should not stop with the development of intellectual powers but must provide the student, for the regulation of his personal and social life, a code of behaviour based on fundamental principles of ethics and religion. Where conscious purpose is lacking, personal integrity and consistent behaviour are not possible. For a satisfactory and successful life, a person must not only be intellectually alert but must be emotionally stable, able to endure the conflicts and tensions that life is almost certain to bring.

2. The British Policy of Religious Neutrality. As foreign rulers of the country, the British adopted a policy of religious neutrality. Christian Missions were not happy in regard to this principle of religious neutrality as they were keenly interested in the propagation of the Christian Faith. Dr. Alexander Duff giving evidence before a Select Committee of the House of the Lords on the 3rd of June 1853 said : "While we rejoice that true literature and science are to be substituted in place of what is demonstrably false, we cannot but lament that no provision whatever has been made for substituting the only true religion Christianity—in place of the false religion which our literature and science will inevitably demolish." The Despatch of 1854 expresses the hope that "Institutions conducted by all denominations of Christianity, Hindus, Mohammedans, Parsis, Sikhs, Buddhists, Jains or any others religious persuasions may be affiliated to the universities, if they are found to afford the requisite course of study, and can be depended upon for the certificates of conduct which will be required."

In reply to an address by the Christian Missionary, Lord William Bentinck, the Governor General said, "The fundamental principle of British rule the compact to which the Government stands

solemnly pledged, is strict neutrality. To this important maxim policy as well as good faith have enjoined upon me the most scrupulous observance. The same maxim is peculiarly applicable to general education. In all schools and colleges supported by Government, this principle cannot be too strongly enforced, all interference and injudicious tampering with the religious beliefs of the students, all mingling, direct or indirect teaching of Christianity with the system of instruction ought to be positively forbidden." These views were affirmed in a Despatch of the Court of Directors dated 13th April, 1858.

3. The Education Commission of 1882. The report of the Education Commission of 1882 observes : "The declared neutrality of the State forbids its connecting the institutions directly maintained by it with any one form of faith ; and the other alternative of giving equal facilities in such institutions for the inculcation of all forms of faith involves practical difficulties which we believe to be insuperable." Again, "It is true that a Government or other secular institution meets, however, incompletely, the educational wants of all religious sects in any locality and thus renders it easier for them to combine for educational purpose ; while a denominational college runs some risk of confining its benefits to a particular section of the community and thus of deepening the lines of difference already existing.

Its Recommendations. The Commission recommended in paragraph 338 :—

"(8) That an attempt be made to prepare a moral text-book, based upon the fundamental principles of natural religion, such as may be taught in all Government and non-Government colleges ;

"(9) That the Principal or one of the Professors, in each Government and Aided Colleges, deliver to each of the College classes, in every Session, a series of lectures on the duties of a man and a citizen."

4. Government's Decision. The Government of India in its Resolution No. 10/309, dated the 2nd October, 1884, reviewing the Report of the Commission, said on this point. "It is doubtful whether such a moral text-book as is proposed could be introduced without raising a variety of burning questions ; and strongly as it may be urged that a purely secular education is imperfect, it does not appear probable that a text-book of morality, sufficiently vague and colourless, to be accepted by Christians, Mohammedans and Hindus would do much especially in the stage of collegiate education to remedy the defects or supply the shortcomings of such an education.

5. The Indian Universities Commission of 1902. The Indian Universities Commission of 1902 considered the question of the inadequacy of a purely secular education but was unable to suggest any definite measures for improvement. It turned down the suggestion to have a course in Theology in view of the opposition,

"not to the recognition of Natural Theology as a subject of University study, but to the introduction of the Theology of any one religion into the curriculum of the University." It decided, that "it is neither practicable nor expedient to make provision for a Faculty of Theology."

6. The Calcutta University Commission, 1917-1919. The question of religious education was not considered by the Calcutta University Commission in view, apparently, of the difficulties of the problem in a country where religions seemed to be a source of strife and disunion.

7. The Central Advisory Board 1944-46. The memorandum on the Post-War Educational Development in India (1943) agreed that "religion in the widest sense should inspire all education and that a curriculum devoid of all ethical basis will prove barren in the end". The Central Advisory Board at its meeting held in January, 1944, recognised the importance of ethical and religious instruction and appointed a special committee under the Chairmanship of Rt. Rev. G. D. Barne, the Bishop of Lahore, to examine the desirability and practicability of providing religious instruction in educational institutions.

The Committee presented an interim report in 1945 and a further report in 1946 at the twelfth meeting of the Board held at Mysore. "After fully considering all aspects of the question the Board resolved that while they recognise the fundamental importance of spiritual and moral instruction in the building of character, the provision for such teaching except in so far as it can be provided in the normal course of secular instruction, should be the responsibility of the home and the community to which the pupil belongs." If we are not prepared to leave the scientific and the literary training of pupils to the home and the community we cannot leave religious training to these. The child is robbed of its full development if it receives no guidance in early years towards a recognition of the religious aspects to life. If this guidance is left to homes and communities, the chances are that communal bigotry, intolerance and selfishness may increase.

American Example. The American Republic has created a secular State, neither religious nor irreligious for the precise purpose of preserving respect for individual conscience. The first amendment to the American Constitution neither approves, nor rejects the religious sanctions of morality. It states: "Congress shall make no law respecting an establishment of religion or prohibiting the free exercise thereof." It guarantees that all Americans may worship God in accordance with their own conscience without any interference from the State. If the State is given power to direct religious matters then freedom of religion would cease.

Australian Constitution. The Australian Constitution has the following clauses: "The Commonwealth shall not make any law for establishing any religion, for imposing any religious observance or

for prohibiting the free exercise of any religion, and no religious test shall be required as a qualification for any office or public trust under the Commonwealth." It conserves the right of each and every citizen to follow his own religious convictions. It recognises the right of every man and woman to worship or not to worship God according to the dictates of his or her own conscience.

Gandhiji's Views. In June 1938, Gandhiji was asked about the place of religious instruction in the Wardha Scheme. He answered, "We have left out the teaching of religions from the Wardha Scheme of education because we are afraid that religions as they are taught and practised today, lead to conflict rather than unity. But, on the other hand, I hold that the truths that are common to all religions can and should be taught to all children." Again in Harijan (16-7-1938), answering a correspondent, he wrote : "I regarded it as fatal to the growth of a friendly spirit among the children belonging to the different faiths, if they are taught either that their religion is superior to every other or that it is the only true religion. If that exclusive spirit is to pervade the nation, the necessary corollary would be that there should be separate schools for every denomination with freedom to each to decry every other, or that the mention of religion must be entirely prohibited. The result of such a policy is too dreadful to contemplate. Fundamental principles of ethics are common to all religions. These should certainly be taught to the children and that should be regarded as adequate religious instruction so far as the schools under the Wardha Scheme are concerned."

The University Education Commission made these recommendations as regards religious education.

(1) That all educational institutions start work with a few minutes for silent meditation.

(2) That in the first year of the Degree course lives of great religious leaders like Gautama the Buddha, Confucius, Zoroaster, Socrates, Jesus, Sankara, Ramunja, Madhava, Mohammad, Kabir Nanak, Gandhi, be taught.

(3) That in the second year some selections of a universalist character from the scriptures of the world be studied.

(4) That in the third year, the central problems of the philosophy of religion be considered.

Constitution and Religious and Moral Education. When Swaraj came and our Constituent Assembly drew up the Constitution of a Sovereign Democratic Republic for ourselves (1950), it expressed its own decision regarding religious education in Articles 28 and 30 which are as follows :—

"28. (1) No religious instruction shall be provided in any educational institution wholly maintained out of State funds.

(2) Nothing in clause (1) shall apply to an educational institu-

tion which is administered by the State but has been established under any endowment or trust which requires that religious instruction shall be imparted in such institution.

(3) No person attending any educational institution recognised by the State or receiving aid out of State funds shall be required to take part in any religious instruction that may be imparted in such institution or to attend any religious worship that may be conducted in such institution or in any premises attached thereto unless such person, or if such person is a minor, his guardian, has given his consent thereto.

30. (1) All minorities whether based on religion or language, shall have the right to establish and administer educational institutions of their choice.

(2) The State shall not, in granting aid to educational institutions, discriminate against any educational institution on the ground that it is under the management of a minority, whether based on religion or language.'

**Recommendations of the Committee on Religious
and Moral Instruction with Shri Sri Prakasa
as its Chairman (1959)**

"It is clear from the wording of these articles that while there would be no instruction in any religion in educational institutions wholly maintained out of State funds, the State would continue to administer and assist institutions where religious instruction was imparted under any endowment or trust. The articles also enjoin that no one will be compelled to attend classes on religious education in any institutions whatsoever. Minorities—whether based on religion or language—are given full rights to establish educational institutions of their own choice. The State is not precluded from giving grants to them. It is certainly not our desire to recommend any departure from the principles embodied in the Constitution."

**Special Stress on the Teaching of Moral
and Spiritual Values**

"We have to lay special stress on the teaching of moral and spiritual values. Moral values particularly refer to the conduct of man towards man in the various situations in which human beings come together—in the home, in social and economic fields, and in the life of the outside world generally.

Conclusions. (a) The teaching of moral and spiritual values in educational institutions is desirable and specific provision for doing so is feasible within certain limitations.

(b) The content of such education in moral and spiritual value should include a comparative and sympathetic study of the lives and teachings of great religious leaders and at later stages, their ethical systems and philosophies. The inculcation of good manners,

social service and true patriotism should be continuously stressed at all stages.

(i) We regard it most important that in any educational scheme, the home should not be left out ; and we suggest that through mass media such as leaflets, talks, radio and the cinema, and through voluntary organisations, the faults and drawbacks of our homes both in the matter of their physical orderliness and their psychological atmosphere, should be pointed out, and instruction given as to how these can be removed. If this is done in an impersonal manner, it would not hurt anyone, but would draw the attention of the persons concerned to their own shortcomings, thus inducing and encouraging them to eradicate these.

(ii) It would be very desirable, as suggested by the University Education Commission, to start work every day in all educational institutions with a few minutes of silent meditation either in the class-room or in a common hall. There could be some sort of prayer also which need not be addressed to any deity or ask for any favour, but which may be in the nature of an exhortation for self-discipline and devotion to some ideal. Occasionally in these Assembly Meetings inspiring passages from great literature, religious as well as secular, and pertaining to all important religions and cultures of the world, could be read with profit. Community singing of inspiring songs and hymns can be most effective at the school stage.

(iii) Suitable books should be prepared for all stages—from primary to university—which should describe briefly in a comparative and sympathetic manner the basic ideas of all religions as well as the essence of the lives and teachings of the great religious leaders, saints, mystics and philosophers. These books should be suitable to the various age groups in different classes of schools and colleges, and should be a common subject of study for all. Collections of poems and selected passages from Sanskrit, Persian, English and the regional languages should be made for the use of young people. These publications will give sound instruction and perhaps teach true wisdom ; they will also tell young people what duties they owe to themselves and to others. Suitable books should be prepared for different stages of education which would help in the inculcation of patriotism and social service. These should particularly concentrate on deeds of heroism and self-sacrifice in the cause of the country and in the service of others. We attach very great importance to the preparation and production of such books. Authors should be selected with the greatest care and their manuscripts should be revised in consultation with eminent authorities. The entire programme of preparing and distributing such publications should be operated by a central agency set up under the auspices of the Union Ministry of Education.

(iv) In the course of extra-curricular activities, learned and experienced persons may be invited to deliver lectures on inter-religious understanding. Educational broadcasts and group discus-

sions may be organised to stimulate interest in the study of moral and spiritual values.

(v) Special stress should be laid on teaching good manners and promoting the virtues of reverence and courtesy which are badly needed in our society. Traditional ways of learning proper conduct from such teachers as the Muslim Maulvis in the north may be encouraged. An all out effort, in the nature of a crusade by all concerned is called for and nothing should be spared for the successful propagation of good manners and courtesy.

(vi) Some form of physical training should be compulsory at every stage. This can be graded from Clubs and Boy Scouts to Auxiliary and National Cadet Corps. Games and sports should be encouraged and the dignity of manual work and social service to the community should be taught. At present, very few students take to these activities. Our suggestion is that everyone should take up some activity of this kind and thus learn habits of cooperating with others, and imbibe the spirit of sportsmanship.

Framework of Instruction

The following suggestions merely indicate a broad framework of instruction in moral and spiritual values at different stages of education :

(1) **Elementary Stage.** (a) The school assembly should be held for a few minutes in the morning for group singing.

(b) Simple and interesting stories about the lives and teaching of prophets, saints and religious leaders should be included in the syllabus for language teaching.

(c) Wherever possible the interest of the child may also be aroused by the use of audio-visual material, especially good quality photographs, filmstrips and coloured reprints showing great works of art and architecture closely connected with the main living religions of the world ; such material could be used in the teaching of Geography.

(d) In the school programme, two periods a week should be set aside for moral instruction. In these the teacher should relate interesting stories drawn from the great religions of the world and explain broadly their ethical teachings. Dogmas and rituals of religion should be excluded from moral instruction.

(e) Through school programme, the attitude of 'service' and the realisation that 'work is workshop' should be developed in the child.

(f) All schemes of physical education and all forms of play in the school contribute to the building of character and the inculcation of the spirit of true sportsmanship.

(2) Secondary State. (a) The Morning Assembly should observe two minutes' silence followed by readings from the scriptures or great literature of the world or an appropriate address. Community singing should also be encouraged.

(b) The essential teachings of the great world religions should be studied as part of the curriculum pertaining to social studies and history. Simple texts and stories concerning different religions may be included in the teaching of languages and general reading.

(c) One hour a week should be assigned to moral instruction. The teacher should encourage the habit of discussion in this class. Apart from this regular class instruction, suitable speakers may be invited to address the students on moral and spiritual values. Joint celebrations may be organised on the occasion of important festivals of all religions. Knowledge and appreciation of religions other than one's own and respect for their Founders, should be encouraged in various ways including essay competitions and declamations.

(d) Organised social service during holidays and outside class hours should be an essential part of extra-curricular activities. Such service should teach the dignity of manual labour, love of humanity, patriotism and self-discipline. Participation in games and sports should be compulsory and physical education, including sex hygiene should be a normal part of school programme.

(e) Qualities of character and behaviour of students should form an essential part of the overall assessment of a student's performance at school.

(3) University Stage. (a) Students should be encouraged to meet in groups for silent meditation in the morning. These meetings should be supervised by the senior staff on a voluntary basis.

(b) A general study of different religions should be an essential part of the general education course in degree classes. In this connection, the following recommendations of the University Education Commission (Radhakrishnan Commission) are commended :

(i) that in the first year of the degree course, lives of the great religious and spiritual leaders like Gautama the Buddha, Confucius, Zoroaster, Socrates, Jesus, Sankara, Ramanuja, Madhava, Mohammad, Kabir, Nanak and Gandhi be taught ;

(ii) that in the second year, some selections of a universalist character from the scriptures of the world be studied ; and

(iii) that in the third year, the central problems of philosophy of religion be considered. Standard works for such studies should be prepared carefully by specialists who have deep knowledge of and sympathy for the religious systems about which they write.

(c) A post-graduate course in Comparative Religion may be instituted. Due importance should be given to the study of the follow-

ing subjects in the appropriate Honours and M.A. courses in the fields of Humanities and Social Sciences.

(i) Comparative Religion.

(ii) History of Religions.

(d) A fairly long period of social service should be introduced by all Universities. In the organisation and conduct of such service considerable attention should be given to the learning and practice of moral and spiritual values.

From the broad suggestions outlined above, it is evident that we are in favour of a comparative and sympathetic study of religions and the teaching of their underlying philosophies and ethical codes. The Constitution provides that religious instruction given in institutions under any endowment or trust, should not be interfered with even when such sort of instruction that we have recommended should be imparted in all institutions and if any special religion is particularly taught in some institutions, this should be in addition to what we have proposed. There is no question of conscience involved in this ; the instruction proposed by us is essential for the building of the character and the making of proper citizens, and by its very nature it cannot possibly injure the susceptibilities of any religious group. We confidently hope that the effective implementation of the suggestions made above will create a proper atmosphere in our educational institutions, so that they may train not only technicians or professional experts but also humane and balanced citizens who can contribute to the happiness and well being of their countrymen and of humanity as a whole.

Concluding Remarks. As we close, we are bound to say that the many ills that our world of education and our society as a whole is suffering today, resulting in widespread disturbance and dislocation of life, are mainly due to the gradual disappearance of the hold of the basic principles of religion on the hearts of the people. The old bonds that kept men together, are fast loosening, various new ideologies that are coming to us and which we are outwardly accepting without inwardly digesting their meanings, are increasingly worsening the situation. The only cure, it seems to us, is in the deliberate inculcation of moral and spiritual values from the earliest years of our lives. If we lose these, we shall be a nation without a soul ; and our attempts to imitate the outer forms of other lands, without understanding their inner meaning, or psychologically attuning ourselves to them, would only result in chaos and confusion the first signs of which are already very distinctly visible on the horizon. Our nation of tomorrow is going to be what the young people at school, college and university today will make it. The edifice of our future entirely depends, for its beauty, dignity, utility and stability on the foundations we lay today, in the form of the education and training that our youth receive. The New India that is in the making, needs the services of us all—old and young, high

and humble alike. If we neglect giving our boys and girls, our young men and young women, proper education and training, the future is dark and dismal indeed. We would regard our labours amply rewarded if by this report, we can help, in however small a measure, in the right orientation of our scheme of education so that our educational institutions—from the primary village school to the largest metropolitan university—may send forth year after year, and generation after generation, men and women fully trained and equipped to take their proper places in the different departments of national activity ; and by their conduct, character and capacity, enhance the happiness and prosperity of our people, and keep the Unity, Integrity and freedom of the country, inviolate for all time to come.

Education Commission on Moral and Spiritual Values. “A serious defect in school curriculum is the absence of provision for education in moral and spiritual values. In the life of the majority of Indians, religion is a great motivating force and is intimately bound up with the formation of character and the inculcation of ethical values. A national system of education that is related to the life, needs and aspirations of the people cannot afford to ignore this purposeful force. We recommended therefore that conscious and organised attempts be made for imparting education in social, moral and spiritual values with the help, wherever possible, of the ethical teachings of great religions.”

Religious Education and Education about Religion

The adoption of a secularist policy, no doubt, means that no religious community will be favoured or discriminated against, and the instruction in religious dogmas will not be provided in State schools. But the Commission has made it emphatically clear that such a secularist policy is *not* an irreligious or anti-religious policy. It does *not* belittle the importance of religion. Such a policy gives to every citizen the fullest freedom of religious beliefs and worship, and promotes not only religious toleration but also an active reverence for all religions. We have to make a distinction between ‘religious education’ and ‘education about religions’. The former is largely concerned with the teaching of tenets and practices of a particular religion in a particular form, and it would not be practicable to provide this type of ‘religious education’ in respect of any religion to pupils belonging to different religious faiths. But it is necessary for a multi-religious democratic State to promote a tolerant study of all religions so that its citizens can understand each other better and live amicably together.

The Commission has recommended : “We suggest that a syllabus giving well chosen information about each of the major religions should be included as a part of the course in citizenship or as a part of general education to be introduced in schools and colleges up to the first degree. It should highlight the fundamental similarities in the

great religions of the world and the emphasis they place on the cultivation of certain broadly comparable and moral and spiritual values.” The Commission observed : “There will be natural points of correlation between the moral values sought to be inculcated and the teachings of the great religions... All religions stress certain fundamental qualities of character, such as honesty and truthfulness, consideration for others, reverence for old age, kindness to animals, and the compassion for the needy and the suffering. In the literature of every religion, the story or parable figures prominently as a means of impressing an ethical value on the followers. The narration of such stories by the teachers at the right moment in the programme of moral education would be most effective, particularly in the lower classes. At a later stage, accounts of the lives of great religious and spiritual leaders will find a natural place...Similarly the celebration of festivals of different religions will afford opportunity for the narration of incidents from the life history of the leaders of these religions. In the last two years of the secondary school, a place should be found for the study of the essential teachings of the great religions.”

Vocationalisation of Education

Why Vocationalisation of Education

The Education Commission pointed out, "Another programme which can bring education into closer relationship with productivity is to give a strong vocational bias to secondary education and to increase the emphasis on agricultural and technological education at the university stage. This is of special significance in the Indian situation where, as we have pointed out, the educational system has been training young persons so far mostly for government services and the so-called white-collared professions."

Concept of Vocationalisation. Too sharp a distinction must not be drawn between general and technical education. General education should introduce children to the world of work and to an understanding of service and technology. While all general education should contain some technical education of a prevocational nature, technical education should contain an appropriate element of general education.

Vocationalisation—Its implementation

(1) Lower Secondary Stage

- (i) In the Industrial Training Institutions, there are courses which are open to those who have completed the primary school. If the age of admission to these courses is reduced to 14, this was originally 16 and now reduced to 15—a large number of students who complete the primary school will be able to enter these courses of industrial training.
- (ii) Technical high schools and junior technical schools should prepare students for jobs in industry. The courses offered should be clearly terminal and adjusted through the greater use of available time to meet the requirements of the Apprenticeship Act and should lead to trade certificates.

The length of courses may vary from course to course with a strong emphasis on experimental work and applied science in all the schools. A number of these schools should be selected for development as quality institutions.

- (iii) A large number of students who drop out after class VII or class VIII will enter employment in family business, some with the idea of setting up their own small scale industry or trade. A wide range of courses should be available on a part-time basis for them to obtain qualification or to upgrade their skills. The Education Department should set up special sections to help such persons.
- (iv) A large proportion of the rural boys will join the family farm. They will have to be provided with further education which will enable them to improve their professional efficiency and general education.
- (v) A large number of girls will leave schools and get married either immediately or a little later. They should be given further education in home science combined with general education.

(2) Higher Secondary Stage

At this stage the Commission has recommended the following types of vocational courses :

- (i) Courses in agricultural and engineering polytechnics including part-time vocational courses in industry arranged on either day-release, sandwich or correspondence course basis.
- (ii) Short condensed courses for upgrading skills of those who have entered into employment or the retraining and re-education of those already qualified. These courses should be organised in agricultural and engineering polytechnics.
- (iii) A large number of courses offered in Industrial Training Institutes require the completion of Class X as a qualification for entry. These courses should be expanded rapidly.
- (iv) In addition, a wide range of other courses in health, commerce, administration, small scale industries and the services should be developed ranging in duration from 6 months to 3 years for a certificate or diploma qualification. These can also be offered on a part-time basis or through correspondence for those already in employment.
- (v) The State Departments of Education should create special section for the overall organisation of courses of this nature whether full-time or part-time. In organising such programmes the manpower needs should be taken into

consideration and there should be close collaboration with the machinery for vocational guidance and with industry and employers generally.

(3) The other recommendations made by the Commission regarding vocationalisation at the higher secondary stage are as follows :—

- (i) The Central Government should provide special grants to State Governments in the centrally sponsored sector for programmes of vocationalisation for secondary education.
- (ii) Effective vocational guidance programmes should be organised at district and State levels. The vocational courses at the school stage should be predominantly terminal in character. However, there should be opportunities for exceptionally gifted pupils, through further study, to rejoin the main stream and move higher.
- (iii) The courses for the training of technicians should be revised in the light of periodic investigations to be carried out in co-operation with industry.
- (iv) Diploma training should be more practical by including industrial experience. (The Commission have made several recommendations in regard to re-organisation of courses in the polytechnics).
- (v) Attempts to train for vocational competence in farming through formal schooling in agriculture at primary and lower secondary levels have failed and further efforts should be held in abeyance.

Future Targets of Vocationalisation of Education

At the lower secondary stage (Classes VIII/IX-X) the enrolment in vocational courses should rise to about 20% of the total enrolment in these classes by the year 1986. The corresponding percentage of enrolment at the end of the Third Plan was 2.2.

At the higher secondary stages (Classes XI-XII) enrolment in vocational courses should be raised to 50% of the total enrolment.

Work Experience

Work Experience—Its Concept as given by the Education Commission

(i) Work experience should be introduced as an integral part of all education. It should involve participation in some form of productive work under condition approximating to those found in real life situation.

(ii) In the lower classes of the primary school, work experience may begin as simple handwork. In the senior classes, it may take the form of learning a craft. Work experience at the lower secondary stage can take the form of workshop training. At the higher secondary stage, work experience should be made available in school workshop and also on farms and in industrial or commercial establishments.

(iii) The range of possible activities that can be provided in a programme of work experience is very wide and the choice will be determined mainly by the availability of materials and trained instructors.

(iv) The concept of work experience is closely related to the philosophy of basic education. What is needed is a reorientation of the basic education programme to the needs of a society that has to be transformed with the help of science and technology. In other words work experience must be forward looking in keeping with the character of the new social order.

(v) While productive work experience in rural areas should be largely built round agriculture, programmes oriented to industry and simple technology should be introduced in a fair proportion of rural schools. In schools where workshop cannot be provided, suitable kits of tools and materials may be manufactured at low cost and made available to the pupils. Gardening should be introduced in as many rural schools as possible.

(vi) It should be the declared object of the State policy to increase the facilities for work experience in industry and agriculture as rapidly as possible and to make them available to schools for the education of the rising generation. While in the transitional stage, the majority of the children will receive experience in the traditional programme of production which the community practices, continuous attempt should be made to bring in science and technology and to introduce the pupils to better ways of performing these traditional tasks.

Why Work Experience. The system of education in this country has, in spite of various attempts made in the past, remained largely bookish and literary. All educationists are agreed on the need for introducing work experience at all stages in schools. As the Education Commission have pointed out :—

- (i) Work experience can be an effective educational tool.
- (ii) Work experience can inculcate among pupils the habit of hard and responsible work.
- (iii) Work experience can lead to better social cohesion.
- (iv) Work experience can increase national productivity.
- (v) Also, with growing unemployment among the educated youth of the country, it has become imperative to divert, at appropriate stage, a large number of pupils to courses of a vocational character.

How to introduce these changes in the educational system poses a challenge to the foresight and ability of educational planners and administrators in the country. Happily, the Education Commission have provided us with valuable guidance which should help in the evolution of a realistic policy.

Past History. A Working Group on vocationalisation and Work Experience traced the history as under :—

Basic Education. It may be useful to examine briefly the outcome of efforts made in the past to introduce the teaching of craft, agriculture and other practical subjects in schools. At the elementary stage, the biggest experiment made on a nation-wide scale was that of basic education. After a promising start, the enthusiasm for

could not make much headway mainly on account of lack of adequate preparation, inadequately trained teachers, dearth of teachers' guide books, insufficient equipment and above all an ill-informed and consequently unsympathetic administration.

Multipurpose Schools. At the secondary stage, the Mudaliar Commission suggested the teaching of craft as one of the core subjects in secondary classes. In addition, the Commission suggested the setting up of multipurpose schools with provision for teaching, in addition to the core subjects, one of the several groups of subjects, viz. Humanities, Science, Agriculture, Commerce, Technical Subjects, Fine Arts and Home Science. Over 3,000 such schools have been set up. Here again the experience, by and large, in respect of the teaching of practical subjects, has been far from happy. The schools are, in many cases, not properly staffed and equipped. The most serious defect, however, in the curriculum for these schools was that they did not provide adequate training either for entry to universities or to vocations.

Technical High Schools and Junior Technical Schools. Apart from the multipurpose schools, we have in the country technical high schools (mainly in the States of Maharashtra and Gujarat) and also junior technical schools. These schools impart, in addition to general education, technical education in classes IX-XI. The training given in these schools is, however, not of a terminal character. There are also about 50 post-basic schools imparting training in agriculture and rural crafts in addition to teaching general education subjects.

Craftsmen Training Programmes. Mention may also be made of the craftsman training programmes in the Industrial Training Institutes run by the Ministry of Labour & Employment. These training programmes are designed mainly with a view to meeting the demands of industry for skilled workers.

Recommendations of the Commission in the Implementation of Work Experience

Work Experience in the Lower Primary Classes (I-IV/V).

(i) The Commission have recommended that work experience in these classes should take the form of simple handwork. The activities suggested are : paper cutting, cardboard work, clay modelling, spinning (where natural in the environment), simple needle work, simple planting indoors or on plots and kitchen gardening.

(ii) This recommendation would be generally acceptable to everybody concerned with the education of children in primary classes. Teachers should be encouraged and given guidance regarding correlation of these activities with lessons in science and arithmetic. But artificial and forced correlation should be avoided.

Implementation of the Scheme of Work Experience

For effective implementation of this programme, the following action is suggested :—

- (a) The teaching of handwork in teacher training institutions should be strengthened. Most of the training institutions are now organised on the 'basic' pattern and have facilities for teaching one or two crafts. Yardsticks should be laid down in respect of teaching staff, equipment, hours of work etc. The syllabi in this subject should be reviewed and the attainment expected of teacher-pupils should be laid down.
- (b) Arrangements should be made for short-term and in-service training courses for teachers.
- (c) Present syllabi in handwork in primary classes should be reviewed. A standard list of tools and materials to be supplied to schools in each of the activities should be drawn up. The present arrangements for supply of tools and material should be reviewed.
- (d) Since there are already facilities for the teaching of craft in a large number of basic schools, every effort should be made to strengthen the teaching of craft in these schools.
- (e) The State Institutes of Education should be associated closely with this work.

Work Experience in the Higher Primary Classes (IV/V-VII/VIII).

(i) At this stage, according to the Education Commission, work experience should be the form of learning craft. The crafts recommended are : cane and bamboo work, leatherwork, pottery, needlework, weaving, gardening, model making, fretwork and work-on farms.

(ii) The Commission has pointed out that at this stage it would be necessary to have specially trained teachers. It has suggested that State Governments may review the position regarding training of craft teachers in their States. It may be a good idea to have a combined two-year art and craft teachers' course for teachers working at this stage.

(iii) At this stage also, there are a number of senior basic schools, where facilities for craft teaching already exist. Before embarking on any large-scale programme, it would be worthwhile to improve the teaching of craft in senior basic schools and other schools having similar facilities.

(iv) Here again the State Institutes of Education will have to undertake revision of curricula in schools, draw lists of equipment and materials, suggest procedure for supplying of tools materials etc.

Work Experience in Lower Classes (VII/VIII-X).

(i) Work experience at this stage, according to the Commission should be productive and should be provided in real life situations. A large number of trades have been suggested by the Commission. It has also been suggested that work experience at this stage should take the form of workshop training. Accordingly, it has been suggested that a workshop should be attached to every school or a group of secondary schools in a phased manner over the next ten years.

(ii) As mentioned earlier, there are already various types of institutions, multipurpose schools, technical high schools, junior technical schools and post-basic schools which are imparting training in practical subjects. A large number of other secondary schools have facilities for teaching home science, agriculture etc. In the first instance, the resources of these institutions should be utilised to introduce work experience. A phased programme will have to be worked out to cover gradually all schools.

(iii) Teachers at this stage can be recruited mainly from skilled craftsmen trained by the ITIs, diploma holders in agriculture etc. The Regional Colleges of Education of NCERT have also started courses for teachers of industrial arts.

(iv) Suitable syllabi will have to be worked out keeping in view the fact that work experience will be one of the subjects taught at this stage. Others being : three languages, mathematics, science, history, geography and civics, art, social service, physical education and education in moral and spiritual values.

(v) The State Boards of Secondary Education will prepare syllabi, lists of equipment, and lay down qualifications of teachers and other conditions for the efficient teaching of the subject. They will also lay down methods of evaluation. Estimates of cost etc., will have to be prepared. On the basis of this, the State Departments of Education will draw a phased programme of implementation.

Work Experience in Higher Secondary Classes (XI-XII).

(i) The Commission has stated that many of the activities at the lower secondary stage would be continued at this stage but the emphasis would shift to workshop practice or actual work experience in industrial and commercial concerns or on farms. The activities would be oriented towards productive works. The skills expected would be of a higher and more exacting nature.

(ii) It is suggested that introduction of work experience at this stage may be postponed to the Fifth Plan because :—

(a) the setting up of higher secondary schools as envisaged by the Commission is still under debate and may not be effective during this plan, and

(b) the success of work experience at this stage will depend on the skills required at the lower secondary stage, where a beginning is yet to be made.

Meanwhile, it is suggested that work experience at this stage should be combined with the programme in social service.

General Programmes of Work Experience

The Education Commission thinks that the range of possible activities which can be adopted to provide productive work experience is enormous and choice will be determined mainly on the availability of materials and trained instructors. While giving the following list the Commission observes that the list given below is purely indicative and the choice of activities would be made in the light of prevailing local conditions. Included in the list are also activities of special interest to girls or to schools in rural areas : .

Lower Primary School

- Paper cutting.
- Cardboard cutting and folding.
- Modelling in clay or plasticine.
- Spinning (where natural in the environment).
- Simple needle work.
- Simple planting indoors or on plots.
- Kitchen-gardening.

Upper Primary School

- Cane and Bamboo work.
- Leather work.
- Pottery.
- Needle work.
- Weaving.
- Gardening.
- Model making.
- Fretwork.
- Work on the farm.

Lower Secondary School

- Wood work.
- Simple metal work.
- Basket work.

Leather work.
 Ceramics.
 Soap-making.
 Tanning.
 Preserving.
 Weaving.
 Electric repairs.
 Cookery.
 Model making.
 Making simple scientific equipment.
 Class-room decoration.
 Carpet making.
 Book-binding.
 Lino-cutting.
 Fabric printing.
 Tailoring.
 Toy making.
 Millinery.
 Wood carving.
 Simple farm mechanics.
 Animal care.
 Crop care.
 Care of the soil.
 Workshop practice.

Upper Secondary School

Many of the activities listed above would be continued but the emphasis would shift to workshop practice or actual work experience in industrial or commercial concerns or on farms. The activities would be oriented towards productive work. Skills demanded in a wood work, metalwork and agriculture would be of a higher and more exacting nature.

Work Experience and Basic Education. The Education Commission observes, "The concept of work experience is closely related to the philosophy underlying basic education. The programme of basic education did involve work experience for all children in the primary schools, though the activities proposed were concerned with the indigenous crafts and the village employment patterns. If in practice basic education has become largely frozen around certain crafts, there is no denying the fact that it always

stressed the vital principle of relating education to productivity. What is now needed is a reorientation of the basic education programme to the needs of a society that has to be transformed with the help of science and technology. In other words, work experience must be forward-looking with the character of the new social order."

A beginning should be made immediately in selected schools and it should be the declared objective of State policy to increase the facilities for work experience in industry and agriculture as rapidly as possible and to make them available to schools for the education of the rising generation. In the transitional stage, majority of the children will receive, of course, experience in the transitional programme of production which the community practices. Even here, however, a continuous attempt can be made to bring in science and technology and to introduce the pupils to better ways of performing these traditional tasks. It should be realised that the effective value of work experience is largely proportional to the extent to which the spirit of modernisation or a forward-look is built into the programme of work.

Implementation. In implementing the programme of work experience, three problems have to be tackled : (1) training of teachers ; (2) provision of necessary facilities including supply of equipment ; and (3) progressive extension of the programme to all schools.

School Complex

Objectives

The objectives of introducing the school complex as given by the Education Commission are "to break the isolation of schools and help them to function in small, face-to-face cooperative groups, and to make a delegation of authority from the Department possible".

What is a School Complex

Education Commission explains this concept as, "There are about 26,000 secondary schools at the beginning of the Fourth Plan. About 14,000 of these are in rural areas. In addition, the rural areas have about 65,000 higher primary schools and about 3,60,000 lower primary schools. In other words, in a rural area having a radius of five to 10 miles, there will be about one secondary school, five higher primary schools and 28 lower primary schools. The total number of teachers may be about 80 to 100. This is a fairly small and manageable group which can function in a face-to-face relationship within easily accessible distance. It has also a great potential for planning and guidance, since there will be at least five or six trained graduates in the group. Moreover, it is possible to provide new aids like a projector, a good library, a good laboratory in each secondary school in the area. This group built round a secondary school should, in our opinion, be adopted as the minimum viable unit of educational reform and developed accordingly."

Two Tiers of a School Complex

The Education Commission suggests that the school complex could be formed as the linking of secondary and primary schools and this programme can be done in two tiers. "In the first tier, each higher primary school should be integrally related to the eight to ten lower primary schools that exist in its neighbourhood so that they form one 'complex' of educational facilities. The headmaster of a higher primary school should provide an extension service to the

lower primary schools in his charge, and it will be his responsibility to see that they function properly. For this purpose, there would be a committee under his chairmanship (of which the headmaster of every lower primary school in his area would be a member) which would be responsible for planning and developing all the schools as a single 'complex'. The second tier would be a committee under the chairmanship of the headmaster of the secondary school (all headmasters of the higher and lower primary schools in the area being members) which will plan the work and give guidance to all the schools in the area in the light of which each higher primary school complex (with its associated lower primary schools) would carry on its work. This group of schools and teachers can be given a good deal of freedom to develop their own programmes, subject to general guidance of the inspecting staff. It would also be requested to co-ordinate its work with the local committees and to derive as much help from this source as possible."

Role of the District Education Officer. The Education Commission visualises this role as "The District Education Officer will be mainly in touch with each school complex and, as far as possible, deal with each school complex as a unit. The complex itself will perform certain delegated tasks which would otherwise have been performed by the inspecting officers of the Department, and deal with the individual schools within it."

Functioning of the Complex

The Commission observes. How will the school complex function ? If the system is to be effective, adequate powers and responsibilities will have to be delegated to the complex. These may include the following :—

1. The school complex may be used as a unit for the introduction of better methods of evaluation and for regulating the promotion of children from class or from one level of school to another.
2. It is possible to provide certain facilities and equipment, which cannot be provided separately to each school, jointly for all the schools in a complex. This will include a projector with portable generator which can go round from school to school. Similarly, the central high school may have a good laboratory and students from the primary schools in the complex may be brought to it during the vacation or holidays for practical work or demonstration. The central high school may maintain a circulating library from which books could be sent out to schools in the neighbourhood. The facilities of special teachers could also be shared. For instance, it is not possible to appoint separate teachers for physical education or for art work in primary schools. But such teachers are appointed on the staff of secondary schools; and it should be possible, by a carefully

planned arrangement, to make use of their services to guide the teachers in primary schools and also to spend some time with their students.

3. The in-service education of teachers in general and the upgrading of the less qualified teachers in particular, should be an important responsibility of the school complex. For this purpose it should maintain a central circulating library for the use of teachers. It should arrange periodical meetings of all the teachers in the complex, say, once a month, where discussions on school problems could be had, some talks or film shows arranged, or some demonstration lessons given. During vacations, even short special courses can be organised for groups of teachers.
4. Each school should be ordinarily expected to plan its work in sufficient detail for the ensuing academic year. Such planning could preferably be done by the headmasters of the schools within the complex. They should meet together and decide on broad principles of development in the light of which each individual school can plan its own programme.
5. It is very difficult to provide leave substitutes for teachers in primary schools, because the size of each school is so small that no leave reserve teacher can be appointed. This becomes particularly difficult in single-teacher schools where, if the teacher is on leave, the school has to remain closed. In the schools complex concept, it will be possible to attach one or two leave reserve teachers to the central secondary school and they can be sent to schools within the complex as and when the need arises.
6. Selected school complexes can be used for trying out and evaluating new text-books, teachers' guides and teaching aids.
7. The school complex may also be authorised to modify, within prescribed limits, and subject to the approval of the District Education Officer the usual prescribed curricular and syllabus.

Careful Preparation and Orientation of Teachers

The Commission recommends that the scheme should be first introduced in a few selected districts in each State as a pilot project. When a district is selected for the purpose, the necessary literature regarding the scheme should be prepared in the regional language and distributed to all the schools and teachers in the district as the first step in the programme. The plan should then be discussed in all its details in group meetings of all teachers and headmasters within the district—these can be conveniently arranged by each inspecting officer for his own beat. In the light of discussions,

Limitations

The Education Commission has also drawn our attention to the dangers and limitations of this concept. The Commission observes, "The great advantages of the school complex are obvious. But, like all human things, it has its dangers also. If the dominant headmasters in any unit happen to be thorough-going educational conservatives, the imaginative class-room teacher may find himself less able to experiment under the system of school complex, than he is at present. This is a risk that much be run. It will be for the District Education Officer (if he is not also a thorough-going conservative) to throw his influence in favour of a more liberal policy. It must also be remembered that the kinds of group reform that will get the blessing and support of a committee of headmasters will tend to be more stale and conservative than those that might be generated by an adventurous individual or single school. The Education Department must, therefore, make it amply clear that the purpose of the school complex scheme is not just to encourage a unit to experiment en bloc but also to foster individual experimentation within the unit."

Expenditure on the Scheme

The Commission states, "It is also necessary to note that the proposal involves additional expenditure. For instance, we expect the headmasters and teachers of the high schools to visit the higher primary schools in the neighbourhood on an average, say, of once a month, and some lower primary schools in the same manner. We also expect that similar visits would be paid by the headmasters of the higher primary schools to the lower primary schools in the neighbourhood. Some payment will have to be made on this account. The programmes of in-service education we have suggested will also involve expenditure. If the students of the primary schools are to be taught science in the high school laboratory during vacations, some payment will have to be made to the teachers concerned. But the scale of this expenditure will not be large and it will yield good results."

Advantages of the Scheme

Such an organisation will have several advantages in helping to

promote educational advance. It will break the terrible isolation under which each school functions at present. It will enable a small group of schools working in a neighbourhood to make a co-operative effort to improve standards. It will enable the Education Department to devolve authority with comparatively less fear of its being misused and provide the necessary stock of talent at the functional level to make use of this freedom.

Educational and Vocational Guidance

Need for Educational Guidance. It is agreed by all that all is not well with our educational system. Every stage in the educational ladder—Elementary, Secondary and University—requires reformation and reorganisation. One of the chief defects of the present system of education is that the talents of the individuals are not being properly harnessed. Education is not according to the aptitude, ability and interest of an individual. The students are made to read subjects without reference to any goal. In the absence of any scientific guidance and counselling, inefficiency, frustration and failure are bound to occur. Our educational institutions are producing misfits on a large scale who are unable to make their lives happier and who fail to contribute their best for society. This leads to a national wastage. "A student who could have done brilliantly in the Humanities may, for want of proper guidance, take up science—or vice versa—and be put down as a dull, not only in school but even in later life if this results in a wrong choice of career. If the choice had been correctly made his whole life pattern may have been different," observes K. G. Saiyaidain. A school student who fails to choose his courses of study wisely and intelligently—which obviously, requires expert guidance—is apt to find his success in school career jeopardised.

Most of our students join colleges without caring for the opportunities that are available to them after completing their college education. They do not receive adequate guidance whether to join a college, a vocational school, a trade school or they should get opportunities for apprenticeship training. Students need help in asking and answering such questions as :

1. Shall I go to college ?
2. If so, which college ?

3. Which subjects should I take ?
4. What are the minimum conditions necessary for admission ?
5. Are there any stipends or scholarships available ?
6. What other forms of education are available ?

Lack of educational guidance has made many a youngman as delinquents.

Lack of educational guidance has created what is known as the problem of 'educated unemployment'.

Lack of educational and vocational guidance has led to a dearth of suitable hands for many occupations needing a specialised training.

The continuous increase in the number of students coming to school for education due to compulsory education programmes also places a definite responsibility on school to provide adequate assistance to students to adjust themselves to school programmes.

It has been rightly said, "nothing but a well-organised network of guidance services throughout the country will save us from the impending tragedy."

Almost every system of education is based on two assumptions. The first is that every student should strive for maximum self-development and the other is that every student should take his place in the society as its useful member. These two assumptions imply that the school and community activities of a child should be based on some definite pattern. Educational guidance service must assist the child to achieve this end.

The Meaning of Educational Guidance

In the words of Dr. K. G. Rama Rao, "Guidance in the wider context of a total curriculum and embracing education of everyone of the basic activity pattern—intellectual as well as social, economic as well as artistic, moral as well as spiritual, domestic as well as physical—becomes all-inclusive, as well as competes with instructional and testing or examining functions of the school in preparing the school leavers for work and life in general."

Jones defines educational guidance as the assistance given to the pupils in their choices and adjustments with relation to schools, curriculums, courses and school life. Following are the aims and purposes of *educational guidance* at the secondary school level.

1. To assist the child secure information regarding the possibility and desirability of further schooling.
2. To help the child to know the purpose and functions of the different types of schools.

after finishing the school career.

8. To help him to find out his physical, mental and emotional handicaps and then to treat them.

Where Guidance should Begin. Jones writes, "The more comprehensive view of guidance makes it imperative that guidance be incorporated in the educational programme beginning with kindergarten." School guidance work should not be considered chiefly a function of the high and higher secondary schools. It is equally important in the early life of the child.

At the kindergarten stage one of the chief functions of educational guidance is to help the child to adjust himself to the new life of the school which is somewhat regimented and not as free as the home life. The vocational aspect is relatively unimportant. Guidance is directed more definitely towards the development of personality, social behaviour and problems concerning learning.

Guidance at the Higher Secondary Stage. There are three important reasons which give rise to the necessity of a specialised guidance service. The first reason is that there is a marked difference in the curriculum of an elementary school and that of a higher secondary school. Curriculum of a Higher Secondary School is a diversified one which involves the problem of selecting subjects in class IX.

The second reason is found in the difference in the organisation of the teaching staff in the two schools. In an elementary school, class-teacher system is followed, whereas in a higher secondary school we usually follow specialist teacher system. In a class-teacher system one particular member of the staff is responsible for the progress of the whole class during the year and he looks after attendance, conduct and the needs of the students under his charge. In a specialist teacher system no teacher is responsible for knowing any one student to the degree that is required for the elementary teacher. Such a situation makes it necessary to provide some way by which the overall needs and problems of pupils may be carefully studied. A guidance service caters to such needs and problems.

The third and the most important reason is that much emphasis is placed upon the vocational point of view. Important decisions are to be made in class IX and XI. In class IX the selection of subjects is largely influenced by vocational requirements. Important decisions are made and help is needed when the students are about to leave the school, either to secure jobs or to go to college or to some other type of further training.

Vocational Guidance and its Need

Vocational Guidance. The General Conference of International Labour Organisation in its vocational guidance recommendations described "Vocational Guidance" as assistance given to an individual in solving problems related to occupational choice and progress with due regard for the individual's characteristics and their relation to occupational opportunity." In the definition adopted by the National Vocational Guidance Association, U.S.A., in 1937, "Vocational Guidance is the process of assisting the individual to choose an occupation, prepare for it, enter upon and progress in it."

It may be stressed again that it is impossible to separate sharply the vocational aspects of guidance from other aspects of guidance such as educational, social, health, etc.

Need for Vocational Guidance

- (a) Complex Nature of society.
- (b) Individual differences.
- (c) Worth of the Individual.
- (d) Changed industrial and educational pattern of the country.

In the absence of vocational guidance, financial and other losses occur to the (a) individual (b) employer (c) society.

The individual feels disgusted if he thinks that he has made a wrong choice of his occupation and is unable to contribute his best. Many a time individuals try to change occupations with the result that the expenditure incurred on the preparation of the occupations previously entered into goes waste.

Inferior goods are produced by those individuals who are misfits in their occupations.

The nation suffers from lack of qualified persons who can handle satisfactorily various establishments—technical, industrial and commercial etc. Lack of vocational guidance leads to the unemployment problem.

Specific Aims of Vocational Guidance. Jones states as follows the specific aims of vocational guidance :—

1. To assist the student to acquire such knowledge of the characteristics and functions, the duties and rewards of the group of occupations within which his choice will probably lie as he may need for intelligent choice.
2. To enable him to find what general and specific abilities skills, etc., are required for the group of occupations under consideration and what are the qualification, of age, preparation, sex, etc., for entering them.
3. To give opportunity for experiences in school (try out courses) and out of school (after-school and vocation jobs) that will give such information about conditions of work as will assist the individual to discover his own abilities and help in the development of wider interests.
4. To help the individual develop the point of view that all honest labour is worthy and that the most important bases for choice of an occupation are (a) the peculiar service that the individual can render to society (b) personal satisfaction in the occupation and (c) aptitude for the work required.
5. To assist the individual to acquire a technique of analysis of occupational information and to develop the habit of analysing such information before making a final choice.
6. To assist him to secure such information about himself, his abilities, general and specific, his interests, and his powers as he may need for wise choice.
7. To assist economically handicapped children who are above the compulsory attendance age to secure, through public or private funds, scholarships or other financial assistance so that they may have opportunities for further education in accordance with their vocational plans.
8. To assist the student to secure a knowledge of the facilities offered by various educational institutions for vocational training and the requirements for admission to them, the length of training offered and the cost of attendance.
9. To help the worker to adjust himself to the occupation in which he is engaged; to assist him to understand his relationships to workers in his own related occupations and to society as a whole.

10. To enable the student to secure reliable information about the danger of alluring short cuts to fortune.

Scheme for Educational and Vocational Guidance

A Scheme for the Introduction of an Educational and Vocational Guidance Programme in Higher Secondary Schools. A Draft Scheme which was prepared by Dr. Rama Rao was discussed in a Delhi Seminar and the following suggestions were made for the implementation of the scheme. Though the scheme was meant for Delhi Schools, yet it must be stated that the scheme can be introduced in all the Higher Secondary Schools in our country.

The scheme is to be implemented in two stages.

Stage I. A minimum programme of guidance to be effective should include the following :—

1. A Pupil Information Service. The functions of this service would be to collect pupil data and to have a proper appraisal at the right time. The maintenance of comprehensive cumulative record card about each student would be the primary function of the service. It should include information obtained from different sources—pupils, teachers and parents. The pupil's performance as revealed in school examination should be included.

2. Educational and Vocational Orientation. Class talks should be arranged for students of class VIII and class XI. The aims of the class talks for class VIII would be to acquaint the students with the grouping and the contents of the higher secondary school courses, to introduce them to broad field of work and to bring out the relationship of school subjects to occupations, and also to give them some information regarding trends of employment opportunities for school leavers.

In class XI, class talks will give more intensive occupational orientation. The students will be informed of the various openings open to them, the necessary training required for entry and other particulars regarding these openings.

These talks should be illustrated by film strips and charts etc., where such aids relevant to the topics are available.

3. Interviews. At least one individual interview should be held with each student in the 'delta' and school leaving classes.

4. Referral. Students who have behaviour problems of a serious nature should be referred to the Child Guidance Bureau where available.

5. School Leaving Report. School leaving reports for all the students of Class XI and those who discontinue their studies any time after the completion of Class VIII should be prepared.

Stage II. The programme mentioned above should be extended to include VI to XI, with modification to suit each class. A variety of academic, vocational and service clubs and societies, to assist children develop and test their interests and acquire new skills, should be organised. Among the various clubs suggested are collecting coins and stamps etc.; photography, mechanical repairs, toy making, drawing and painting, gardening, cooking etc.

Work Experience. A school committee consisting of senior students and the members of the staff to explore opportunities of work inside and outside the school should be set up.

Administration. A full or part time counsellor depending on the size and finance should be appointed in each school. A minimum of 3 periods a week should be allotted for guidance work in each section of class VIII and class XI. However the number of guidance periods per class would depend on the comprehensiveness of the guidance programme and the extent of assistance he is given by the other members of the staff. Approximately a counsellor in charge of two sections (one in class XI and one in class VIII) should have at least four guidance periods. A counsellor in charge of 6 sections should be relieved of about 8 teaching periods. These should be in addition to his usual number of free periods.

Accommodation. A separate room should be provided for the counsellor to enable him to conduct interviews without disturbance and to store tests, records and other material.

School Committee for Guidance. A School Committee for organising guidance work and to enlist the support of the members of the staff should be formed.

Periodical Conferences. Conference of school staff, parents and youth Employment service personnel should be held to give a fillip to the guidance service.

Expenditure. A recurring expenditure of Rs. 500 per annum should be included in the school buget for stationery, journals, tests, film strips, etc. A special pay of Rs. 40per month should be sanctioned for the guidance worker.

Educational and Vocational Guidance Programme for Pupils Secking Admission in Class IX.

In a traditional high school, the student had little to chose from in terms of curricula. There was only one curriculum which all the students had to follow. But with the diversification of the courses at the secondary stage, the students are forced with the task of making proper choices and the teachers are required to help them in this task. The success or the failure of the students in school and later in life depends to a considerable extent on the selection of suitable subjects.

To quote K. G. Saiyidain, "A Student who could have done brilliantly in the Humanities may, for want of proper guidance, take

up science or *vice versa*, and be put down as a dud, not only in school but even in later life if this results in a wrong choice of a career. If the choice had been correctly made, his whole life pattern may have been different.'

Generally speaking electives are chosen on the basis of

(a) Pupil's ability, aptitude, talents and interests.

(b) Parent's wishes.

(c) Availability of place in school.

(d) Facilities for further education after passing the Higher Secondary Examination.

(e) Employment opportunities.

Preparation of Pupils for Curricular Guidance

(a) In the Delta class, orientation talks to assist students choose wisely the elective group of curricular subjects should be organised.

(b) In order to develop and explore the interests of the pupils, a varied programme of curricular activities should be provided in the school and which may also be utilised in assessing the students for curricular and vocational choice.

It may be seen from the table on front page that in the thirteen States and four Union territories from which information is available only 78 out of 24868 high and higher secondary schools have whole time counsellors. This is really a very low figure. The number of schools having part-time counsellors is 160 which is equally disconcerting. This means, only 238 schools which form 1% of the total number of schools, have guidance programme conducted by trained counsellors on full-time or part-time basis. The majority of schools with guidance programmes are being served by career masters. The number of schools is 4407 (17.72%).

A comparison of different states indicates that Kerala has the highest percentage of schools having a guidance programme. It is 86.27%. Next came Himachal Pradesh and Tripura with 42%. Gujarat, Rajasthan and Mysore respectively have 31.50%, 29.64% of their schools providing guidance services. Orissa is the only state with a state guidance bureau which has reported that no high or higher secondary school in it has any guidance programme. In terms of actual numbers, however, besides Kerala where 1100 out of 1275 schools have trained career masters. Maharashtra, Mysore, Gujarat and West Bengal each have more than 500 school with trained guidance workers.

But these figures must be viewed very cautiously. The mere presence on the staff of a trained career master does not always mean that a guidance programme is actually being offered in the school. Experience has shown that many such schools do not have a properly organised guidance programme. There may be many reasons for it. It may be because adequate provision for guidance is not made in

Guidance Facilities in Schools (1968)

<i>State</i>	<i>Total No. of High/Hr. Sec. Schools</i>	<i>Schools with whole-time Counsellor</i>	<i>Schools with Part-time Counsellor</i>	<i>Schools with Career Masters</i>	<i>Total No. of Schools having Guidance</i>
1. Andhra Pradesh	2660	5 (·18)	2 (·08)	243 (9·13)	250 (9·39)*
2. Assam	1429	—	—	181 (12·66)	181 (12·66)
3. Bihar	2000	—	80 (4·00)	20 (1·00)	100 (5·00)
4. Gujart	1600	4 (·25)	—	500 (31·25)	504 (31·50)
5. Haryana	750	2 (·26)	—	30 (4·00)	32 (4·26)
6. Kerala	1275	—	—	1100 (86·27)	1100 (86·27)
7. Madhya Pradesh	1500	40 (2·66)	—	50 (3·33)	90 (6·00)
8. Maharashtra	4000	10 (·25)	36 (·90)	500 (12·50)	546 (13·65)
9. Mysore	1743	5 (·28)	—	512 (29·38)	517 (29·64)
10. Orissa	825	—	—	—	—
11. Punjab	1080	3 (·28)	—	255 (23·61)	258 (23·89)
12. Rajasthan	899	9 (1·00)	—	258 (28·64)	267 (29·64)
13. West Bengal	4194	—	—	507 (12·09)	507 (12·09)
14. Delhi	436	—	42 (9·63)	72** (16·51)	72 (16·51)
15. Himachal	269	—	—	125 (42·23)	125 (42·23)
16. Manipur	100	—	—	20 (20·40)	20 (20·00)
17. Tripura	81	—	—	34 (42·00)	34 (42·00)
<i>Total</i>	<i>24868</i>	<i>78 (·30)</i>	<i>160 (·65)</i>	<i>4407 (17·72)</i>	<i>4603 (18·55)</i>

Note—The table does not include figure for U.P., Tamil Nadu, Jammu & Kashmir and Union Territories other than those listed.

* Figures within brackets indicate percentages.

** The figure includes '42' schools with part-time Counsellors.

the school time-table or because there is no monetary incentive being given to the career masters for this additional work. Another causes may be the non-availability of suitable, adequate and up-to-date guidance literature. In some schools, the headmasters do not even give relief to the career masters in their normal teaching load, then the principals in many cases do not always look with favour upon guidance services in the schools. They fail to realise the need for and importance of guidance in the present day world.

Popularisation of Guidance and All-India Conference on Vocational Guidance and Aptitude Testing (June 1971)

Organisation of the Conference. The Conference was organised by the Department of Educational Psychology and Foundations of Education at NIE Campus, New Delhi on 2-3 June, 1971, in collaboration with the Director General of Employment and Training, New Delhi.

Topics Discussed. The conference was concerned with two themes :—

- (i) Collaboration between various agencies concerned which provide vocational guidance ;
- (ii) Collaboration between various agencies for developing aptitude tests, mainly the adaptation to Indian conditions of GATB (General Aptitude Test Battery) of the U.S. Employment Services.

Recommendations. Some of the recommendations made at this Conference are :—

1. Determined efforts should be made to carry out the guidance programme in schools.
2. School Headmasters should be properly oriented towards guidance.
3. Only trained and qualified persons should be appointed in guidance positions.
4. Teachers should be trained in the administration and scoring of psychological group tests, especially intelligence and aptitude tests, as career masters are neither trained to undertake this responsibility nor have the time.
5. A meeting of the District Guidance Officers participating in the Union Ministry of Education's Pilot Project on Guidance and Career Advisory Services at the School Stage should be held early to prepare for the launching and evaluation of the programme. Also, District Guidance Committees, comprising employers, teachers, parents and vocational guidance officers should be formed.

6. Test construction work should be the responsibility of institutions, State or Central, which have the necessary resources and competence in the area. NCERT's prototype material may be quite useful for the programme.
7. Career masters may work in employment exchanges for three or four months so that they may get sufficient background for their work.
8. The prototype materials prepared by NCERT may be published and priced.

Education of Women

Historical Background

In ancient India women enjoyed a high status and the educational opportunities accorded to them were the same as to men. The '*upanayana*' ceremony, which marked the initiation of a child into the study of *Vedas*, was performed, for boys as well as for girls. In fact, the *Atharvaveda* observes that a maiden's marriage is successful only if she has been properly trained during her period of studentship.

With the changed political, social and economic situation in the Medieval India, the status of women received a great setback and consequently the opportunity for her education. Education of women remained somewhat neglected during the British period also.

The advent of independence ushered in a new era with regard to the status of women. Our Constitution gives great importance to the equality of status and opportunity for men and women. "The state shall not discriminate against any citizen on grounds only of religion, caste, sex, place of birth or any of them." "There shall be equality of opportunity for all citizens in matters relating to employment or appointing to any office under the state" [Articles 15(1), 16(1) and 16(2)].

The National Committee on Women's Education appointed by the Government of India in 1958 recommended special measures to bridge the gap between girls' education and boys' education at the primary and secondary levels.

The Union Ministry of Education set up the National Council for Women's Education in 1959 to advise the Government on issues relating to the education of girls at the school level and also of adult women.

Earlier the University Education Commission (1948-49) had observed "there cannot be an educated people without educated

women. If general education had to be limited to men or to women, that opportunity should be given to women, for then it would most surely be passed on to the next generation."

Expansion of Women Education in India—A Review

Women Education (1880-1854). Touched by the work done by missionaries and philanthropic Englishmen, several great Indians lent their support to the opening of girls' schools and breaking down the traditional popular resistances against women education. Among them, Raja Ram Mohan Roy and Pandit Ishwarchandra Vidyasagar played an important role. By 1850, the stage was set for a change in the State policy. The lead was taken by Lord Dalhousie, the Governor-General of India who declared that no single change in the habits of the people is likely to lead more important and beneficial consequences than the introduction of education for their female children and Government should give its frank and cordial support to the cause. These orders were later on confirmed by the Educational Despatch of 1854.

Women Education (1854-1882). With the despatch of 1854, the State promised financial assistance and even direct action. Unfortunately the disturbances of 1857 followed by the declaration of the policy of social and religious neutrality slowed down the official effort. The establishment of municipalities and the levy of the local fund aiding the primary education helped the establishment of special primary schools for girls between 1870 and 1882. The four visits of Miss Mary Carpenter, the great English social reformer, to India were of great significance. She felt that the establishment of training colleges for women teachers was a must. Her direct access to the highest officers in the country made it possible to give immediate effect to her proposal, and the first training colleges for women primary teachers were established by 1870. By 1882, there were 2,600 primary schools, 81 secondary schools, 15 training institutions and one college for the education of women and girls. The first women to get the degrees of an Indian University were two students of Bethune's School, now a college, who graduated themselves from the Calcutta University in 1883.

Women Education (1882-1902). The recommendations of the Indian Education Commission (1882-83) on women education included the support of girls' schools from Public Funds, the payment of liberal grants-in-aid, the offer of freeships, the scholarships, the raising up a class of women for teaching girls through various plans etc. Unfortunately, the government could not assign adequate grants for the purpose due to a period of financial stringency that followed the report of the Commission, and, therefore, the progress of women education mostly depended on private enterprise. By 1901-02, private effort accounted for 11 out of 12 women colleges, 356 out of 422 secondary schools, 3,982 out of 5,305 primary schools and 32 out of 45 training institutions for women. One significant

development during the period was the opening of a career in medicine for women. In 1901-02, there were 76 women in medical colleges and 166 in medical schools. The Lady Dufferin Fund was created for developing medical education for women.

Women Education (1902-1921). The period between the appointment of the Indian Universities Commission in 1902 and the transfer of education to Indian control in 1921 showed a better progress in the education of women mainly due to the great public awakening and the first world war. By 1921-22, there were 19 colleges for women, 675 secondary schools for girls and 21,956 primary schools for girls. The burden still lay heavy on private effort, though direct government effort had considerably increased. A very significant development of this period was the considerable rise in the age of marriage. This naturally increased the educational opportunities for girls and their continuance in schools and colleges. The demand of the educated men themselves to have educated wives gave further encouragement to women education. Another significant event of the period was the establishment of S.N.D.T. Indian Women's University in Bombay by Maharsi D. K. Karve in 1916. In 1921-22, there were 197 women in medical colleges, and 334 in medical schools, 67 in colleges for teaching and 3,903 in schools for teaching. A large number of women took up commercial and technical careers.

Women Education (1921-1947). The favourable factors for the promotion of women education of this period were : a further rise in the age of marriage, the teachings of Mahatma Gandhi, the phenomenal awakening of Indian womanhood, and the introduction of Provincial Autonomy in 1937. No doubt it was also a period of financial stringency and political struggle. In spite of these difficulties women education made considerable progress. In 1946-47, there were 59 Arts and science colleges for women, 2,370 secondary schools for girls, 21,479 primary schools for girls, and 4,288 institutions for professional, technical and special education for women. Owing, to the greater initiative shown by the State Governments and local bodies the burden on private effort was considerably reduced as it accounted for 16,979 women institutions out of a total of 28,196 women institutions. The period also showed an increase in the trend towards co-education. By 1947, a little more than half of the number of girls under instruction were studying in mixed schools.

Women Education (after 1947). The University Education Commission (1948-49) made certain recommendations regarding women education. But the most important development in the field of women education was the setting up of a National Committee for Women's Education under the chairmanship of Smt. Durgabai Deshmukh which examined the problem of women education very comprehensively. As a result of the recommendations of the committee, a National Council for the education of women was set up in 1959 under the chairmanship of Smt. Durgabai Deshmukh. State

Councils have been established in the States and Union Territories. Smt. Hansa Mehta Committee was appointed in 1962 by the National Council for Women's Education to examine comprehensively the problem of curricula for girls at all stages of education. Another Committee was appointed by the Council in May 1963 with Shri M. Bhaktavatsalam, Chief Minister of Madras as its chairman to look into the causes for lack of public support particularly in rural areas for girls' education. Most of the State Governments have created the post of an Assistant or Deputy Director of Education in charge of girls' education. As Against 24·6% of the total population in the age-group 6-11 in 1950-51, 61·6% girls attended school in 1965-66; in the age group 11-14, it increased from 4·5% to 16·5%.

Girls Education (1968-69)

<i>Age-group</i>	<i>Boys % of enrolment</i>	<i>Girls % of enrolment</i>
(a) 6-11	95·2	58·5
(b) 11-14	45·4	18·8
(c) 14-17	28·5	9·8

Fields for Women's Education. The University Commission observed :

"The greatest profession of women is, and probably will continue to be, that of home maker. Yet her world should not be limited to that one relationship. There are varied conditions which may properly lead a woman to seek fulfilment of her life in other fields. Among the great contributions to human welfare have been some men who determined to forego home and family in order to commit themselves wholly to the chosen work of their lives. Women should have the same opportunity. The place of wife and mother offers opportunity for exercise of the highest qualities and skills, yet for a woman to decide that she can best fulfil her aims by living a single life should not put her under a social disability. Sometimes, also, there is a period before marriage during which a young woman can do useful work, such as teaching or nursing. Sometimes the loss of a husband makes her the bread winner for the family. When children are grown, there often remain ten to twenty-five years of vigorous life in which a woman may wish to have a useful career. Sometimes husband and wife wish to share a common occupation through the years. Sometimes with woman, as with men, the needs of home and family leave time for useful and interesting occupations. For all such circumstances educational opportunities should be available.

One of the desirable developments of Indian life and education for both men and women is a great increase in the kinds of work open to them. A wholesome and interesting society will have many and varied occupations and professions. The educational system at all levels should prepare men and women for such varied callings."

Appraisal of Women's Education

The University Education Commission came across such comments from eminent educationists :—

The Principal of the college wrote : 'Women's present education is entirely irrelevant to the life they have to lead. It is not only a waste, but often a definite disability.' Another wrote, 'The present system of women's education, based as it is upon man's needs, does not in any way make them fit for coping with the practical problems of daily life. Their education should give them a practical bias, especially from the point of view of families, for making them good mothers, teachers and doctors and nurses.'

One experienced woman educator wrote to the Commission : "The modern educated Indian women is neither happy nor contented nor socially useful. She is a misfit in life. She is highly suppressed, and needs opportunities for self-expression, the new education must provide this opportunity."

One educator wrote : 'It is too late in the day to suggest that women should not have the same courses as men. The remaining question is : What additional opportunities shall be provided ?'

The Commission was of the view that it was the duty of those in charge of women's education to face these problems and to design education for women which will enable them to have full and adequate lives. One educator wrote : "There has been no planning of women's education. It has just happened."

CO-EDUCATION

Meaning of Co-education. Co-education is the joint participation of the sexes in all the activities with freedom for the social contact. It is the education of the boys and girls together in the same classes of a school, admission to the school being secured by pupils of both sexes on equal terms and opportunities and freedom being provided for the association of the sexes in intra- and extra-school activities. Co-education does not mean just the admission of girls into boys schools merely for the purpose of teaching.

"Co-education is not a modern experiment in India ; thousands of years ago, in the Vedic Bharat, the sons and daughters of Mother India acquired an ideal system of education in an ideal way, sitting together in the sacred temples of lore and art—the 'Tapovans' sisters and brothers, as they were known, being pupils of the same Guru, developed a sweet relation far from any tinge of sex-passion. These boys and girls had made our ancient India an envy of the world."

Gandhiji said, "Co-education must be allowed and boys and girls must cultivate healthy and harmonious relationship, based upon a strong moral code."

R. K. Mukerjee has summed up the necessity of co-education in the following words :

"In the sphere of education this general and new fundamental reason (*i.e.* emancipation of woman) acquires a special emphasis and significance. Highest pedagogic theory must more and more consider education as not to be confined within the boundaries of the school or a matter of the class-room only. Education must take into account the whole of the unfolding personality, the complete development of the individual, his intellect no less than his emotions, awakening and feeding every kind of interest. But this programme is too large for the school proper and its ordinary and formal methods. Much of it depends for its realisation on what may be called the environment of the school. Now an environment for the purpose of such a complete education cannot exclude the relations between the sexes, both in the influences of those in charge, and in the companionship of those growing up. Each has something to give to the other, and without that being given in time, the growth of each runs the risk of being starved, or warped, resulting not only in a serious deficiency at the time, but perhaps much more for the needs and problems of later life."

Advantages of Co-education

1. Economic factors. Co-education *i.e.*, the education of boys and girls under the same roof, enables us to meet the increasing demand of education by women. Poor India can hardly afford to open separate colleges for women. There is lack of funds, adequate building, good teachers and equipment for the education of girls.

2. Psychological consideration. Hayward wrote, "Future mothers should not have to confess with tears, that they do not understand boys." Boys and girls should not be brought up as strangers. Greater contact between boys and girls results in a sense of comradeship and they would be able in course of time to approach each other without giving that undue emphasis to the sexual side that is but natural in the present circumstances.

3. Humanising effect. Co-education has a humanising influence on both boys and girls in that tendencies to extremes of masculinity and femininity are checked. It makes the girls less shy and makes the boys more refined. The mixing of the sexes is natural as the feminine mind gains from association with boys and *vice-versa*.

4. Disciplinary problems are solved. Discipline becomes easier to maintain because boys wish to stand well and in the eyes of the girls and *vice-versa*. The punishment of a fault is feared more than it would be in separate institutions.

5. Modification in personality traits. Because of co-education, boys learn perseverance, conscientiousness and industriousness from girls and the latter learn independence, self-reliance and resource from boys.

6. Increase in purity. It is felt that boys are made less purer and more modest by co-education, the girls are made less ignorant and sentimental and consequently less liable to make a grave matrimonial mistake in life. There is less underground excitement and more excitement of a natural and obvious kind.

7. Intellectual benefits. There is no doubt that attendance in the classess becomes almost cent-per-cent. Besides, women can teach some subjects better than men and thus we can make out a good case for co-education.

8. Homely atmosphere. Co-education enables us to have a polished home.

9. Better domestic life It would be developed through co-education. Addison once said, "Female friendship is necessary for intellectual development."

10. Reduction in Mental Diseases. Dr. Freud believed that co-education alone could keep young people free from diseases of mind.

Disadvantages of Co-education

1. Freely mixing up creates troubles. Dr. Stanley Hall writes : "During the early years of adolescence when the body is rapidly changing and a sense of an awkwardness and reticence is felt, the two sexes should not intrude upon each other." Since in our tropical country sex consciousness develops at an early age, free mixing is fraught with danger.

2. Less attention to girls. Girls always suffer. It is generally seen that in co-educational institutions adequate facilities are not provided for girls.

3. No thorough cleansing of the mental make-up. Co-education is a farce in many cases as we have not taken to this business in the right spirit. There must be a sane attitude and proper and healthy outlook.

4. Unhealthy effects on intellectual pursuits. "Men cannot study when women are around and that if women are let into a college, they are likely to get round some of the professors and marry them and then good-bye to research and higher thought."

5. Separate needs of men and women. Dr. Joad has remarked, "Girls tend to be more interested in their immediate surroundings, in what is pretty and ornamental, boys in what is more remote from them, in what is useful, in what is general and what is abstract. Boys seek expression in investigating, exploring, constructing, girls through artistic and emotional channels." Rousseau has also talked in the same tune, "A man seeks to serve, a woman seeks to please, the one needs knowledge, the other taste...To be pleasing in his sight, to win

his respect and love, to train him in childhood, to tend him in manhood a counsel and to console, to make his life pleasant and happy, these are the duties of women for all time." Same type of education for boys and girls is hardly suitable.

6. Physiological factors. Co-education cannot prove useful as a uniform programme of physical and mental activities for both the sexes would affect the health of adolescent girls.

7. Undue emphasis on make-up. Co-education results in girls using gorgeously bordered saris which are gazed at by the boys. The boys come immaculately dressed. There is every possibility that shy glances, stealthy eying and admiring gazes will lead to various unhealthy practices.

8. Separate Code of Discipline. The discipline that is suitable for a boy is not as a rule equally suitable for a girl.

9. Distraction of attention. Mixing of sexes at the adolescent stage when sex urge is at its highest pitch, is not advisable. It distracts the attention of both boys and girls and hampers their progress in studies.

10. Immorality. The strongest objection is from the moral point of view. Emotional disturbances will take place. They are exposed to sex appeal and morals are at risk. Sex criminality will increase with co-education. The girls and lady teachers will be exposed to sexual licentiousness.

Conclusion

The consensus of opinion is that co-educational institutions are desirable at the primary and the university level but not at the secondary level. It can be said that by reason of the physiological and psychological differences between the sexes, the functional differences in the social economy, and the social conditions and circumstances of the country, co-education at the secondary stage not only proves to be of doubtful value, but also restricts the opportunities for fullness, of development and for specific training of the girlhood of the country. Under the prevailing social and economic conditions, there is no harm in introducing co-education. Such an education should have mixed staff at all stages. Co-educational institutions should possess congenial climate. As far as possible, these institutions should brim with activities so as to keep them well occupied.

Recommendations of the University Education Commission

Separate Schools between the Age of 13 and 18. The University Education Commission was of the view that there seems to be a definite preponderance of opinion that from the thirteenth or fourteenth year of age until about the eighteenth, separate schools for boys and girls are desirable.

Why no Co-education at College Level. Some of the arguments given are (*i*) a woman cannot develop her personality in a men's college. (*ii*) there is no need for women to undergo the nervous strain of examinations. (*iii*) Women's education should be more in keeping with the temperament and needs of women as wives and mothers. (*iv*) Overcrowding is more serious for women than for men. (*v*) 'A pleasing feature of colleges for women has been the intimate relations of students and teachers.' Some of these arguments have greater weight in the absence of truly co-educational colleges where the needs of men and women would be given equal weight in designing the programme.

Co-education at the College Level. As the age of entry to degree colleges would, on our recommendation, be approximately eighteen, college education may be co-educational, as it is at present in many medical colleges. Separate institutions at this level would demand unjustified increase in expense. To maintain separate institutions for men and women side by side, duplicating equipment, even when it is very inadequate, would be an undue tax upon limited financial resources. Separate women's colleges commonly have poorer buildings, poorer equipment, and less able teachers. As far as possible co-educational institutions should be encouraged at the degree level.

Co-educational Institutions and Their State of Affairs

The University Education Commission noted the following :

There are few truly co-educational colleges in our country. Rather, there are men's colleges to which women have been admitted as students, which is a very different matter. Quite frequently in 'co-educational' colleges nearly all the amenities are for men, and women are little more than tolerated. Often sanitary facilities for women are totally inadequate, and sometimes wholly lacking. Recreation space and facilities for women similarly are inadequate or lacking. One of the most frequent suggestions made to us was that where women and men attend colleges, that a physical directress for women be provided.

In many co-educational colleges women have little or no share in college life. Women's hostels usually accommodate but few women, and sometimes none at all. According to the comments received, in one city where there are few or no hostels some women students must leave home at 5 A.M. in order to attend classes, and no provisions for refreshments are provided, although the students do not finish their work until mid afternoon. The Commission received comments to the effect that the attitudes of men students left much to be desired.

Other weaknesses of 'co-educational' colleges reported to the Commission are that there are too few women teachers, and that examinations are a severe nervous strain to women."

Recommendations. 1. The ordinary amenities and decencies of life should be provided for women in colleges originally planned for men, but to which women are being admitted in increasing numbers ;

2. There should be no curtailment in educational opportunities for women, but rather a great increase ;

3. There should be intelligent educational guidance, by qualified men and women, to help women to get a clearer view of their real educational interests, to the end that they shall not try to initiate men, but shall desire as good education as get men. Women's, and men's education should have many elements in common, but should not in general be identical in all respects, as is usually the case today ;

4. Women students in general should be helped to see their normal places in a normal society, both as citizens and as women and to prepare for it, and college programmes should be so designed that it will be possible for them to do so ;

5. Through educational counsel and by example the prevailing prejudice against study of home economics and home management should overcome ;

6. Standards of courtesy and social responsibility should be emphasised on the part of men in mixed colleges ;

7. Where new colleges are established to serve both men and women students, they should be truly co-educational institutions, with as much thought and consideration given to the life needs of women as to those of men. Except as such colleges come into existence there are no valid criteria for comparing segregated education with co-education ; and

8. Women teachers should be paid the same salaries as men teachers for equal work.

Co-education and Secondary Education (1952-53)

The Commission's views in this context are "It seems to us, therefore that there can be no hard and fast policy with regard to co-education and that in this respect the pattern of education in our schools cannot be very much in advance of the social pattern of the community, where the school is located. We are of the opinion that where it is possible separate schools for girls should be established as they are likely to offer better opportunities than in mixed schools, to develop their physical, social and mental aptitudes and all States should open such schools in adequate numbers. But it should be open to girls, whose parents have no objection in this matter, to avail themselves of co-educational facilities in boys schools."

The Commission has, however, recommended some conditions for co-educational and mixed schools. These are mentioned as below :

1. The lady teachers and the men teachers must be appointed in these schools.
2. There should be provision for these subjects as are liked by the girls, e.g., Music, Home Craft, Drawing, Painting, etc.
3. Separate retiring rooms, playing fields, sanitary conveniences should be provided for girls.
4. There should be atleast one woman teacher on the staff in rural schools, where the number of the girl students happens to be less.
5. Special co-curricular activities suited to girls like Home Nursing, Needle Work, Girl Guiding should be introduced.
6. The women representatives should be taken on the management so as they could see that necessary facilities for girls are actually provided by the management.

Smt. Hansa Mehta Committee Recommendations of Women's Education (1962)

1. **Co-education at the Elementary Level.** Co-education should be adopted as the general pattern at the elementary stage.
2. Vigorous educative propaganda may be organised to overcome resistance to co-education at this stage ; but as a transitional measure, separate primary or middle schools for girls may be provided where a demand for them is put forward with a view to increasing the enrolment of girls.
3. At the secondary and collegiate stages, there should be full freedom to the managements and parents either to evolve common institutions or to establish separate ones for girls.
4. Steps should be taken to appoint women teachers in all educational institutions at the secondary and university stages, which are ordinarily meant for boys. Such appointments should be made obligatory if girls are actually attending. Similarly, some men teachers should also be appointed in separate secondary schools and colleges for girls and the ban, which now exists in some parts of the country on such appointments (or to confirmation of teachers already appointed) should be removed.

DIFFERENTIATION OF CURRICULA FOR BOYS AND GIRL

Recommendations of the Committee Appointed by the National Council for Women's Education on the Differentiation of Curricula for Boys and Girls (1962)

A New Basis for Social Organisation and the Role of Women.
i. Hansa Mehta Committee that was appointed by the National

Council for Women's Education, to examine comprehensively the problem of curricula for girls at all stages of education made valuable recommendations on various aspects of girls' education. After reviewing the historical development during the last 150 years of official policies and public attitudes regarding co-education and the need, extent and nature of the differentiation in curricula for boys and girls at all stages of education—primary, middle, secondary and university—the Committee came to the conclusion that the new basis for social organisation in which the biological fact of sex will play a minor role, must allow each individual the fullest freedom to develop his or her own native endowment without having to conform to pre-determined pattern of behaviour on the basis of his or her sex and in the opinion of the Committee that was the only basis on which we can build the democratic and socialistic pattern of society which is visualised in our Constitution.

Equality of Women. "If society is to be organised on this new basis, women will have to be given real and effective equality with men.

In order to enable them to attain *de facto* equality with men and usher in the new social order, the Committee recommended the adoption of the following measures :—

- (a) The existing gap between the education of boys and girls should be rapidly bridged.
- (b) Intensive efforts should be made to educate the public regarding the scientific findings about sex differences and to develop proper attitudes in each sex towards the other. In particular, the public mind will have to be disabused of all traditional concepts of the physical and intellectual inferiority of women. The public in general and the teachers in particular will have to be made to realise that it is unscientific to divide tasks and subject on the basis of sex and to regard some of them as 'masculine' and others as 'feminine'. Similarly, the fact that the so-called psychological differences between the two sexes arise, not out of sex but out of social conditions will have to be widely publicised and people will have to be made to realise that stereo-types 'masculine' and 'feminine' personalities do more harm than good.

The Role of Women in Society. The Committee felt that in the progressive society like ours the women are expected to share the social and economic responsibilities of men. The Committee felt :—

"We do realise that child-rearing and home making will have prior claims on women. We, however, feel that owing to the development of sciences and technology, both these functions will occupy less and less of their time. It would now be possible for women to take up a career of their own and it will be a great social tragedy

to allow them to do so. We, therefore, recommend that the education of women should be so planned as to enable them to follow a career of their choice without, in any way neglecting their responsibilities for child rearing and home."

Proposal for Differentiation of Curricula and other allied Problems. "In the ultimate democratic and socialistic pattern of society which we visualise, education will be related to individual capacities, aptitudes and interests which, as stated above, are not related to sex. There, would, therefore be no need in such a society to differentiate curricula on the basis of sex.

But it will be some years before this new social order is created. In the transitional phase in which we are at present, certain psychological differences between men and women as well as certain divisions of social functions based on them will have to be accepted as matters of fact and as a practical basis for building up the curricula for boys and girls. While doing so, however, care should be taken to see that values and attitudes which are essential in the long run are increasingly built up in men and women and that no step is taken which all tend to perpetuate or intensify the existing differences. It is on these fundamental assumptions that the proposals for a differentiation of curricula between boys and girls made in this Report are based."

A. Primary Stage

1. No differentiation should be made in the curricula for boys and girls at the primary stage.

2. The traditional attitude to regard certain tasks, as 'manly' and others as 'womanly' is generally built up in early childhood through social atmosphere. Simple needle-craft, cooking, music and dancing, introduced in primary schools for boys and girls alike will incidentally counter-act these influences and build up new and healthy attitudes.

3. The proportion of women working as primary teachers should be substantially increased and women should be appointed on the staff of all primary schools. For this purpose the scheme recommended by the National Council for women's Education for increasing the number of women teachers as the primary stage should be immediately and vigorously implemented.

B. Middle Stage

1. The ultimate objective before the country is to provide free and compulsory education to all children until they reach the age of 14. The curriculum to be provided for this minimum course of general education should be common to boys and girls and no differentiation should be made therein on the basis of sex. This common course should also include a core curriculum of home

2. In our opinion, 11 or 12 is too early an age to make the choice of an elective course and no tangible benefit can be derived by introducing electives at this early stage. We, therefore, recommend that special intensive courses of vocational preparation should be organised after the middle school stage.

3. All middle schools should provide for the teaching of a craft which is suited to local conditions and, wherever possible for the teaching of more than one craft. Where only one craft has been introduced, it should be obligatory for all boys as well as girls. Where more than one craft has been introduced, each child should have the freedom to choose any craft for which he or she has an aptitude.

4. In all middle schools it is desirable to have mixed staff; but where girls do attend a middle school ordinarily meant for boys, appointment of women teachers on staff should be obligatory.

5. Steps should be taken to expand the provision of facilities for middle school education for girls as largely as possible. This may be done by appointing women teachers on the staff of co-educational schools, or by establishing separate girls' schools. When both these methods are not possible, adequate stipends should be provided to enable deserving and needy girls to stay in hostels and pursue their studies in middle/secondary schools. Wherever necessary and possible, transport facilities should be provided to girls to enable them to attend middle schools which may not be easily accessible from their places of residence.

C. Secondary Stage

In the opinion of the Committee, the best form to organise secondary education would be as follows :

- (a) The general courses of secondary education should not attempt to give vocational competence; but craft or hand-work or productive labour of some type should form an integral part of such courses.
- (b) The Committee recommended the provision of intensive vocational courses which will begin after the middle school stage and be spread over one to three years. These should be run as parallel alternatives to the general courses of secondary education with a view to preparing boys and girls for different vocations in life. They should also be sufficiently diversified to meet the requirements of girls. As a special case, and in view of the comparatively inadequate development of middle school education for girls, especially in rural areas, it may be desirable to admit, to such courses, even those girls who may not have technically completed the elementary school but who may otherwise be in a position to benefit from them. Continuous research and investigation are necessary to ascertain

the changing social conditions and employment potential in different parts of the country and to adjust the provision made for these courses accordingly.

- (c) At the end of the secondary course, there should be a second bifurcation. Some students would go in for courses in humanities or sciences to prepare themselves intensively for admission to universities. The others would be diverted into various walks of life through intensive training in specialised courses that would aim at giving vocational competence. These courses should have large variety and should be based on the manpower requirements and social needs of different areas as ascertained through continuous programmes of research and investigation.

Measures Suggested to Improve Diversified Courses

The following measures are needed to improve the existing diversified courses at the secondary stage to meet the special needs of the girls :

- (a) to add further subjects to the existing diversified courses;
- (b) to prepare teachers for the teaching of these diversified courses and ;
- (c) to give financial assistance to the girls' school to enable them to introduce the teaching of new elective subjects and also to raise the standard of teaching in subjects which have already been introduced.

The Committee recommends that steps should be taken to improve the introduction of home economics.

Music and fine arts is another group of subjects which is popular with girls. It is, therefore, recommended that steps should be taken to prepare the necessary teachers and to revise the scale of pay, where necessary. Liberal financial assistance should also be made available to girls' schools for the introduction of these courses.

Sex education is essential at the middle and secondary stages. It should not, however, form part of the curriculum and be given by mature, competent and well trained teachers. If satisfactory conditions and competent teachers are not available, it should not be attempted at all.

To meet the needs of deserving and needy girls, who have no access to separate secondary schools, hostels should be attached to central secondary schools for girls and adequate stipends, to cover maintenance costs, should be provided, on the basis of merit-cum-aid. Wherever necessary and possible, transport facilities should be provided to enable girls to attend separate secondary schools which are not easily accessible from their homes.

Special encouragement should be given to girls who study mathematics or science at the secondary stage and special efforts should be made to prepare women teachers of mathematics and science.

D. Co-curricular Activities

There should be a proper balance between the curricular and co-curricular programmes and they should be blended into a harmonious whole. The teachers should be properly trained or oriented to secure this essential balance between curricular and co-curricular activities.

E. Text-Books

1. In textbooks dealing with languages and social studies, adequate attention should be paid to the needs, experience and problems of girls by including such topics as special festivals of women, games popular with girls, lives of great women, etc.
2. One of the important values to be built up through textbooks is to enable each sex to develop a proper respect towards the other. This aspect of the problem needs greater attention and emphasis.
3. Text-book Committees should have an adequate representation of women.

F. University Stage

Universities should review periodically the provision they have made for the courses designed to meet the special needs of girls and take necessary action to remove the deficiencies discovered.

G. Vocational Education

1. Immediate attempts should, therefore, be directed to expand this provision to the largest extent possible both for boys and girls.
2. It is absolutely essential to relate the provision of vocational courses at the secondary and higher stages of education with man and woman power requirements of society,
3. At the end of the middle school course, there should be junior technical schools and trade schools in a number of vocations for which women have good employment opportunities.
4. At the end of the secondary stage, vocational schools should be organised to prepare women personnel of the middle group for as many vocations as possible.
5. At the university stage there should be a third level of diversified courses of vocational competence to prepare women to hold responsible and executive positions in as many vocations as possible.

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PUBLIC SUPPORT FOR GIRLS' EDUCATION

Recommendations of the Committee to look into the Causes for Lack of Public Support particularly in Rural Areas for Girls' Education and to enlist Public Co-operation (1963)

Appointment of the Committee. The National Council for Women's Education at its meeting held in April 1963 endorsed the suggestion made by the Union Education Minister in his inaugural address that a small committee be appointed to look into the causes for lack of public support, particularly in rural areas, for girls' education and to enlist public cooperation. This suggestion was made in view of the serious short-falls in the enrolment of girls. The Committee was to suggest, therefore, ways and means of achieving substantial progress in this field.

The Chairman of the National Council for Women's Education accordingly appointed in May 1963 a Committee with Shri M. Bhaktavatsalam, Chief Minister, Madras as Chairman.

"The Committee is convinced that it is only through a willing, educated and informed public that any progress can be made at all. Not only is the need urgent, but the ground is also ready for a comprehensive programme for mobilising public cooperation to promote girls' education and giving it constructive channels of expression. It is essential that official action and the programme based on initiative must move forward in close harmony. There has to be a sense of partnership and shared responsibility between official and voluntary agencies. There is also the need for a systematic and sustained programme with an adequate organisation for mobilising community effort.

Fields for the Cooperation of the Public. Direct cooperation of the public should be encouraged in the following fields :—

- (i) Establishing private schools ;
- (ii) Putting up of school buildings ;
- (iii) Contributing voluntary labour for construction of school buildings ;
- (iv) Helping in the maintenance of school buildings ;
- (v) Helping in providing suitable accommodation for teachers and students, particularly in the rural areas ;
- (vi) Popularising co-education at the primary stage ;
- (vii) Creating public opinion in favour of the teaching profession and to give greater respect to the teacher in the community ;
- (viii) Undertaking necessary propaganda to make the profession of teaching for women popular ;

- (ix) Encouraging married women to take up part-time teaching in village schools and to work as school mothers ;
- (x) Initiating action and participating in educative propaganda to break down traditional prejudices against girls' education ;
- (xi) Setting up and organising school betterment committees. improvement conferences ;
- (xii) Supplying mid-day meals ;
- (xiii) Supplying uniforms to poor and needy children ; and
- (xiv) Supplying free text-books and writing materials to needy children.

The State Councils for Women's Education are the most suitable agencies for providing the organisation and leadership for mobilising community effort. They should function as a part of the network of which the District Councils at the district level, and the *Mahila Mandals* and similar voluntary bodies at the town and village levels would be strong and active links. These agencies should look upon mobilising of community effort and educating public opinion to promote girls' education as their main and primary responsibility. They should aim at building up in villages and towns teams of voluntary workers, men and women, who are willing to devote themselves to this cause and work actively for its promotion.

State's Responsibility. The State should educate public opinion in favour of girls' education through :

- (i) School improvement conferences ;
- (ii) Seminars ;
- (iii) Radio talks, audio-visual aids and distribution of informative pamphlets and brochures ;
- (iv) Enrolment drives, generally in June and special additional drives for girls' education during Dussehra ; and
- (v) Assisting voluntary, welfare and other organisations, private individuals and associations engaged in the field of education of girls and women.

Popularisation of Girls Education

1. School Improvement Conferences. School Improvement Conferences should be arranged widely throughout the States and particularly in the less-advanced States in order to encourage people to contribute to educational awakening and advancement.

2. Schools in All Areas. The State should continue to help in an abundant measure in providing necessary schooling facilities in all the areas and in all habitations, however small, so that the local population can make use of them. It should be the endeavour of the State to provide a Primary school in each habitation with a population of

300. However, in scattered, hilly or isolated areas, Primary schools should be provided where the population is even less than 300, so as to provide every habitation with a school within a mile ; a Middle school in each habitation with a population of 1,500 and above, within a radius of 3 miles. The establishment of Secondary schools should be planned in such a way as to cater to the needs of these Primary and Middle school leavers. Generally there should be a Secondary school within a radius of 5 miles.

3. Pre-primary Schools. It is necessary that in rural areas particularly, Pre-Primary schools should be attached to Primary schools so that children get accustomed to schooling even at the tender age.

4. Sound Buildings. The existing functional deficiencies of schools should be remedied by replacing buildings which are totally inadequate to modern educational needs. There should be periodical inspection of school buildings and hostels so as to ensure their structural soundness and suitable sanitary facilities.

5. More Attractive School Work. School work should be made more attractive and should present education in terms more acceptable to pupils.

6. Appointment of Women Teachers. The question of shortage of teachers is bound to remain for a long time and, therefore, concerted effort have to be made to recruit as many women teachers as possible. Women are by general consent the best teachers for the Primary classes in all schools. It should be the aim of all States to appoint women teachers in Primary schools and a greater number of women teachers in mixed schools. A school staffed by women will inspire greater confidence in the parents and make them willing to send their children to mixed institutions.

7. Special Incentives for Women Teachers. The basis of recruitment of women teachers should be widened and their conditions of work should be made more attractive. Financial incentives like special allowances for hilly, isolated or any other specific backward rural areas should be given to teachers. Each State may specify areas where such allowances would be available.

8. Part-time Employment. Attempts should be made to bring back to the teaching profession married women who have left it in recent years and to bring in women from other occupations to supplement the teaching staff.

9. Condensed Courses for Adult Women. Condensed courses should be organised on a larger scale for adult women, particularly from rural areas so that they could take up teaching jobs in the villages.

10. Relaxation in Age Limit of Women Teachers. In order to attract more women teachers the age-limit for the unmarried and

married women teachers should be relaxed in the case of those working in village schools. The service conditions of such married women who do part-time teaching work should be made more attractive.

11. Women Teachers to be Posted Nearer. Women teachers, as far as possible, should be posted in or near their own villages.

12. Improved Salary Scales for Teachers. The salary scales of all teachers should be improved and the teachers should be paid an economic wage, so that they may be retained in the profession. There should be improvement in the service conditions of teachers. Provision should also be made for retirement benefits.

13. Special Incentives for Teachers in the Rural Areas. Special drives should be organised to attract people in rural areas to the teaching profession as the best form of social service needed for the upliftment of the villages.

14. Training Schools with Hostels. Training schools with hostels need to be located in the rural centres and near 'difficult' areas where girls from the villages are trained and sent back to work in their own or neighbouring villages. This will help to bring forward teachers with local ties in these areas. The policy of locating the large majority of training schools in the towns should be reconsidered.

15. Preference to Women from Rural Areas in Admission. During selection of trainees for training schools and colleges, special preference should be given to women from rural areas seeking admission.

16. Increased Training Facilities. The training facilities available in each State should be of such a magnitude that the annual output of trained teachers would be equal to the demand for additional teachers.

17. Improvement in Inspection. The inspecting staff should be adequate and strong if improvement is to be secured and waste reduced. Such a staff can keep close touch with the local conditions and offer sound advice for economical and well directed improvement and development. A separate women inspectorate will help to bring in more girls to school.

18. Quarters for Women Teachers. It is only by providing women teachers with quarters near the schools that we can attract many educated women to the teaching profession. As far as possible, twin quarters should be built near the school premises, which would help the women teachers to live with social workers, the Gram Sevikas and others and have company and social life. The recommendations made by the Fourth Plan Working Group of the National Council for Women's Education regarding the requirements of teachers' quarters in the Fourth Plan both for Elementary and

20. More Responsibility on Local Bodies. Local bodies should be made responsible for the provision of school buildings, equipment, playing fields and the like and observance of the educational code in the State.

21. Adult Education. In the field of social education, a determined effort should be made to increase the number of literacy classes for women in rural areas and to carry out intensive campaigns for the spread of literacy amongst women. Activities in this field should be administered by the Education Departments of the State Governments.

22. Central Assistance. A study of conditions prevailing in the less advanced States and the conditions prevailing in some of the advanced States has convinced that the problem of enlisting public cooperation and increasing the enrolment of girls in schools, particularly in the rural areas, is one which needs to be tackled in a co-ordinated manner and from several angles. In the following paragraphs some general recommendations are made as applicable to most of the less advanced States followed by some specific recommendations regarding the individual States.

Such Central Assistance should be :—

(a) At the elementary stage for :—

- (i) preparation and employment of women teachers ;
- (ii) grant of free books, writing materials and clothing to girls ; and
- (iii) twin quarters for women teachers.

(b) At the secondary stage for :—

- (i) provision of separate schools for girls ;
- (ii) hostels ;
- (iii) grant of free books, writing materials and clothing to girls ; and

(iv) preparation and appointment of women teachers in increasing numbers.

23. School Buildings. The provision of suitable school buildings is one of considerable urgency. For this, either hundred per cent central assistance or long-term Central loans should be provided.

24. Free Education for Girls and Central Assistance. While hundred per cent Central assistance would be necessary for the above schemes and projects, it is of paramount importance that all States should find ways and means of providing funds in order to make education free for all girls up to the secondary stage. Unless this incentive is given, it will be very difficult for the parents in their present economic circumstances to afford girls' education.

25. Special Funds by States for Girls' Education. It is seen that the States who have not made reasonable provision of girls' education in their plan have also been the States, generally speaking, where progress of girls' education has not been appreciable. The State Governments should make all reasonable provision for the advancement of girls' education and earmark such funds.

26. Community Support for Girls' Education. If resources that are available are limited and do not meet the full requirements, in such cases the concentration of activities should be in rural areas. The States Governments may explore possibilities of raising of local resources for the purpose of meeting the full requirement of the advancement of girls education.

27. State Councils for Womens' Education. The States should also use the good offices of the State Councils for Women's Education and strengthen these Councils by providing for them a proper secretariat and suitable financial assistance to meet the expenses of T.A. and D.A. of the members so that the latter can be in constant touch with the workers in the field and provide them with necessary advice, guidance and encouragement.

28. Compulsory Education Acts. Compulsory Education Act should be introduced in States where it does not exist. In addition, State Government should provide sufficient incentives and carry on propaganda to attract all children to school.

29. Curriculum. While the curriculum can be the same for both boys and girls at the primary and middle stages, provision should be made for offering of electives comprising subjects which would be of special interest to girls and which would help them later in their fields of activity. The recommendations made by the Committee of the National Council for Women's Education in the report "Defferentiation of Curricula for Boys and Girls" should be carefully studied and action taken by the States to implement them as far as possible.

30. Double Shifts. In schools that lack accommodation but have a rush of admission, the double-shift system may be tried as a temporary measure.

31. Flexibility of School Hours. Changing of school hours and school holidays to seasonal requirements has been found in some places to be a helpful concession to parents who would otherwise not be in a position to spare the children for attending classes. We are here reminded of the Hartog Committee's observations of the permanent adjustment of school hours to hours of labour or more doubtful device especially where it affects children below nine on ten years of age. Such an adjustment of school hours can only be regarded as a temporary measure, and this form of remedy should not be allowed to obscure fundamental principle that the proper place for young children during the day is the school house. In any case, children should attend school before, and not after, they have been engaged in work. While these arguments are relevant, we feel that suitable change of hours of schooling will have to be considered in the backward and hilly areas where due to climate, economic and other conditions parents will not be in a position to send children to school while in fact, they could be employed on the farms during the harvesting season for instance, or some manual work in order to bring in some return to the family. We agree that the adjustment of school hour and school holidays to seasonal requirements cannot be a uniform feature of a permanent palliative, but till things improve and till the parents and guardians are educated so as to understand the need for proper schooling for their girls and boys, the adjustment of school hours would act as an healthy inducement.

32. Extra Labour by Less Advanced States. The less advanced States of Bihar, Jammu and Kashmir, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh have their peculiar problems and not all solutions, could be generally applied to solve their difficulties. This much, however, can be said that these States will have to make extra efforts and aims at additional enrolments in classes I-V and VI-VIII. At the secondary stage, the enrolment should be nearly double the present rate. This is necessary for ensuring that there is an adequate supply of women teachers.

Education Commission on Women Education

The Education Commission (1964-66) wrote, "In the modern world, the role of the women goes much beyond the home and the bringing up of children. She is now adapting a career of her own and sharing equally with man, the responsibility for the development of society in all its aspects. This is the direction in which we shall have to move. In the struggle for freedom, Indian women fought side by side with men. This equal partnership will have to continue in the fight against hunger, poverty, ignorance and ill health." Should this imply that education of men and women should be identical ? In this connection the recommendations of the

Committee on Differentiation of Curricula for Boys and Girls (1964) make an interesting reading.

Recommendations of the Education Commission (1964-66) on Women's/Girls' Education

Education of Women. The Education Commission fully endorsed the recommendations of the three committees which have examined the problem of women's education in recent years : (a) The National Committee on the Education of Women under the chairmanship of Shrimati Durgabai Deshmukh ; (b) The Committee on Differentiation of Curricula between Boys and Girls under the chairmanship of Shrimati Hansa Mehta ; and (c) The Committee under the chairmanship of Shri M. Bhaktavatsalam which studied the problem in the six States where the education of girls is less developed.

The Commission invited special attention to the following recommendations of the National Committee on Women's Education :—

- (1) The education of women should be regarded as a major programme in education for some years to come and a bold and determined effort should be made to face the difficulties involved and to close the existing gap between the education of men and women in as short a time as possible.
- (2) Special schemes should be prepared for this purpose and the funds required for them should be provided on a priority basis.
- (3) Both at the Centre and in the States, there should be a special machinery to look after the education of girls and women. It should bring together officials and non-officials in the planning and implementation of programmes for women's education.

In addition, it will also be necessary to give adequate attention to the education of girls at all stages and in all sectors.

The role of women outside the home has become an important feature of the social and economic life of the country and, in the years to come, this will become still more significant. From this point of view, greater attention will have to be paid to the problems of training and development of women. Opportunities for part-time employment which would enable women to look after their homes and to have a career outside will have to be largely expanded. As the age of marriage continues to rise, full-time employment will have to be provided for almost all young and married women. As the programme of family planning develops, elder women whose children have grown up, will also need employment opportunities. Teaching, nursing and social service are well-recognised areas where women can

have a useful role to play. In addition, several new avenues will have to be opened out to them.

Education of Girls—Primary Stage. (Refer to Chapter on Primary Education).

The education of girls requires special attention in fulfilling the Constitutional directive and should be accelerated on the lines of the measures recommended by the National Committee on Women's Education.

Education of Girls—Secondary Stage

(1) Efforts should be made to accelerate the expansion of girls' education so that the proportion of girls to boys reaches 1 : 2 at the lower secondary stage and 1 : 3 at the higher secondary stage in 20 years.

(2) Emphasis should be placed on establishing separate schools for girls, provision of hostels and scholarships, and part-time and vocational courses.

Differentiation of Curricula for Boys and Girls

The recommendation of the Hansa Mehta Committee that there should be no differentiation of curricula on the basis of sex is endorsed. Home science should be provided as an optional subject but not made compulsory for girls. Larger provision should be made for music and fine arts, and the study of mathematics and science should be encouraged.

Education of Women, University Stage

At present, the proportion of women students to men students in higher education is 1 : 4. This should be increased to about 1 : 3 to meet the requirements for educated women in different fields. For this purpose, a programme of scholarships and provision of suitable but economical hostel accommodation should be developed.

(2) At the undergraduate stage, separate colleges for women may be established if there is a local demand. At the postgraduate level, however, there is no justification for separate institutions.

(3) Women students should have free access to courses in arts, humanities, sciences and technology. Courses in home science, nursing, education and social work need to be developed as these have attraction for a large proportion of girls. Facilities for advanced training in business administration and management should also be provided.

(4) Research units should be set up in one or two universities to deal specifically with women's education.

Women Teachers

(1) The employment of women teachers should be encouraged

at all stages and in all sectors of education. Opportunities for part-time employment should be provided for them on a large scale.

(2) Adequate provision should be made for residential accommodation particularly in rural areas.

(3) The condensed courses for adult women operated by the Central Social Welfare Board should be expanded.

(4) Increasing facilities should be provided for education through correspondence courses.

(5) Wherever necessary special allowances should be given to women teachers working in rural areas.

The Resolution on the National Policy on Education has stressed the importance of women education : "The education of girls should receive emphasis, not only on grounds of social justice, but also because it accelerates social transformation."

Sustained efforts to extend education among girls have been made from the First Plan period. Girl students, as a percentage of this population in the relevant age-group, increased from 25 in 1950-51 to 59 in 1968-69 in classes I to V, 5 to 19 in classes VI to VIII, and 2 to 10 in classes IX to XI. The Fourth Plan has laid greater stress on girls' education : "The gap between the enrolment of boys and girls is still considerable. During the Fourth Plan, the enrolment of girls will be further increased through the organisation of special programmes, the nature of which will vary from State to State."

National Council for Women's Education. The National Council for Women's Education which was set up in 1959 by the Ministry of Education discharges the following functions :—

(a) To advise Government on issues relating to the education of girls at school level and of adult women.

(b) To suggest policies, programmes, targets, and priorities for the expansion and improvement of the education of girls and women in the fields stated at (a).

(c) To suggest measures for utilising to the best voluntary effort in the field of education of girls and women as in (a).

(d) To suggest suitable measures for educating public opinion, in favour of the education of girls and women.

(e) To assess the progress achieved from time to time and suggest measures for evaluation of work being done and for watching the progress of implementation.

(f) To recommend collection of specific data on problems relating to the education of girls and women and to recommend

sample surveys and research projects and/or seminars as may be deemed necessary from time to time.

The National Council for Women's Education, held its twelfth meeting in April 1970 and discussed the progress of girls' and women's education in the country and made several recommendations for accelerating the progress. The major recommendations are set out below ;

(1) Impetus should be given by the States in the recruitment of women teachers for classes I to V.

(2) Literacy programmes for women should be intensified and their content should include education for national integration and national development. Emphasis should be laid on population education and increased economic productivity.

(3) Hostels should be constructed for girls at secondary stage.

(4) Separate cell should be created in the Directorate of Education to look after the problems of girls' education.

Higher Education

Central Government and Higher Education. At the University stage, the Ministry of Education and Youth Services is mainly concerned with :

(a) The Five Central Universities of—

- (1) Aligarh
- (2) Banaras
- (3) Delhi
- (4) Visva-Bharati
- (5) Jawaharlal Nehru (New Delhi) ;

(b) The institutions deemed to be administered under section 3 of the University Grants Commissions Act ;

(c) Co-ordination and maintenance of standards of higher education as laid down in the constitution through the University Grants Commission ;

(d) The Rural Institutes of Higher Education.

(e) A few other programmes of higher education.

Types of Universities. A University can be established only by an Act of either Union Parliament or a State legislature and enjoys internal autonomy. There are at present 85 universities operating under Acts passed by the Central or State legislatures. Five of these universities are incorporated under Acts of the Central legislature. They are also financed by the Central Government and, therefore, are known as the Central Universities.

Affiliating Universities. The Universities recognize external colleges offering instruction in its courses of studies. They are diffused over a large area and keep within their fold scattered colleges.

The Unitary Universities. A 'Unitary' university has been defined as "one usually localised in a single centre, in which the whole of the teaching is conducted by teachers appointed by or under the control of the University. It has full control over its administration, teachers and teachings.

The Federal Universities. The main characteristics of a university of this type are (1) The university and its constituent colleges are situated in close proximity of each other. (2) Each constituent college is actively engaged in a work of a University standard. (3) Each constituent college is prepared to forgo some measure of its autonomy in order to share in and contribute to the type and government of the university as a whole. (4) The actual teaching as far as possible, be provided by the constituent colleges under the guidance of the university.

University Grants Commission. Usually abbreviated to UGC, it is a statutory body for the purpose of allocation and disbursement of grants to universities and responsible for co-ordination and maintenance of standards of the Universities. Earlier, it was University Grants Committee set up in 1945, in response to the recommendation contained in the Sargent Plan. From a committee it became a commission in 1953 on the recommendation of the University Education Commission. Under the UGC Act of 1956, it received its statutory status. Besides being paying, allocating and dispensing body, the UGC performs numerous other functions. Its significant achievements include the introduction of the three-year degree course, promotion of research, revision of pay scales, improvement of libraries and laboratories and raising of standards.

Earlier Universities. On the recommendations of the Wood's Despatch (1854), universities were established in Calcutta, Bombay and Madras on the lines of the London University, which was then a purely examining and a non-resident body. The Punjab and Allahabad Universities were incorporated on the lines of the old universities in 1882 and 1887 respectively.

THE REPORT OF THE UNIVERSITY EDUCATION COMMISSION (1948-49)

The University Education Commission was appointed by the Government of India 'to report on Indian University Education and suggest improvements and extensions that may be desirable to suit present and future requirements of the country'. The scope of the enquiry was set forth in the Resolution of the Government of India, Ministry of Education, dated 4 November 1948. The Commission was inaugurated on 6th December, 1948. It submitted its Report in August 1949.

1. Dr. S. Radhakrishnan, Spalding Professor of Eastern Religions and Ethics at the University of Oxford.

(Chairman)

Members

2. Dr. Tara Chand, Secretary and Educational Adviser to the Government of India.
3. Sir James F. Duff, Vice-Chancellor, University of Durham.
4. Dr. Zakir Husain, Vice-Chancellor, Muslim University, Aligarh.
5. Dr. Arthur, Former President, Antioch College, First Chairman, Tennessee Valley Authority, President, Community Service Inc.
6. Dr. A. Lakshmanaswami Mudaliar, Vice-Chancellor, University of Madras.
7. Dr. Meghnad Saha, Palit Professor of Physics, Dean, Faculty of Science, and President, Post-Graduate Council of Science, University of Calcutta.
8. Dr. Karm Narayan Bahl, Professor of Zoology, University of Lucknow.
9. Dr. John J. Tigert, Formerly Commissioner of Education of the United States, and President Emeritus of the University of Florida.
10. Shri Nirmal Kumar Sidhanta, Professor of English and Dean Faculty of Arts, University of Lucknow (Secretary).

Terms of Reference. The terms of the reference of the Commission were to consider and make recommendations in regard to :

- (a) The aims and objects of university education and research in India.
- (b) The changes considered necessary and desirable in the constitution, control, functions and jurisdiction of universities in India and their relations with Government, Central and Provincial.
- (c) The Finance of Universities.
- (d) The Maintenance of the highest standards of teaching and examination in the Universities and colleges under their control.
- (e) The courses of study in the universities with special reference to the maintenance of a sound balance between the Humanities and the Sciences and between pure science and technological training and the duration of such courses.
- (f) The standards of admission to university courses of study with reference to the desirabilities of an independent university entrance examination and the avoidance of unfair discrimination which militate against Fundamental Right 23(2).

- (g) The medium of instruction in the universities.
- (h) The provision for advanced study in Indian culture, history, literatures, languages, philosophy and fine arts.
- (i) The need for more universities on a regional or other basis.
- (j) The organisation of advanced research in all branches of knowledge in the universities and institutes of higher research in a well co-ordinated fashion avoiding waste of effort and resources.
- (k) Religious instruction in the universities.
- (l) The special problems of the Banaras Hindu University, the Aligarh Muslim University, the Delhi University and other institutions of an all-India character.
- (m) The qualifications, conditions of service, salaries, privileges and functions of teachers and the encouragement of original research by teachers.
- (n) The discipline of students, hotels and the organisation of tutorial work and any other matter which is germane and essential to a complete and comprehensive enquiry into all aspects of university education and advanced research in India.

THE AIMS OF UNIVERSITY EDUCATION

1. To Teach that Life has a Meaning

A life of strenuous endeavour for human betterment is not possible, if we are not persuaded that life has a meaning... This is a generation which knows how to doubt but not how to admire, much less to believe. This aimlessness, this indifference to basic issues, is to no small extent, responsible for the decline of standards, for the fading of ideas, for the defeat of human endeavour.

2. To Impart system

Our ancient teachers tried to teach subject and impart wisdom... We cannot be wise without some basis of knowledge though we may easily acquire knowledge and remain devoid of wisdom. To use the words of the Upanisad, we may be the knowers of texts (*mantravit*) and not knowers of self (*atamvit*)... No amount of factual information would make ordinary men into educated or 'virtuous' men unless something awakened in them an innate ability to live the life of soul.

"Where is the wisdom we have lost in knowledge ?
 Where is the knowledge we have lost in information ?
 The cycles of Heaven in twenty centuries,
 Bring us farther from God and nearer to the dust."

3. To Impart Knowledge

Since education is both a training of minds and a training of souls, it should give both knowledge and wisdom.

The outlines of the social philosophy which should govern all our institutions, educational as well as economic and political, are indicated in the preamble to our Draft Constitution.

4. Training for Democracy

We are engaged in a quest for democracy through the realisation of justice, liberty, equality and fraternity.

The basis of democracy is the belief in the inherent worth of the individual, in the dignity and value of human life.

5. Training for Self-Development

Education is not a discipline imposed from above on an apathetic or acquiescent nature. It is a process of leading up the inward nature to its fulfilment. All true development is self-development.

6. Education—a Life-Long Process

The process of education as growth is continuous and life-long. It is said that a pupil gets a fourth of his education from his teacher, another fourth by his own intellectual effort, a third fourth from his fellow students and the rest in course of time through life and experience.

7. Development of Values

A human being lives in the world of nature but apprehends a world of values. We can break him on the wheel, burn him at the stake, bury him alive in a concentration camp or crucify him, but we cannot make him lie or steal or betray the cause he believes in. Our education should encourage the development in its members of fearlessness of mind, strength of conscience and integrity of purpose. If human life is to remain human, it must deepen and live by a sense of moral obligation. Without moral freedom there can be no true democracy. Freedom and justice in the world depend on there being enough men and women who say "We will obey God rather than men." For the sake of the soul we may sometimes have to abandon the world.

8. Cultural Regeneration

The chief course of spiritual nourishment for any people must be its own past perpetually rediscovered and renewed. A society without a knowledge of the past which has made it would be lacking in depth and dignity.

9. Understanding of the Past as Well as Present

We must be critical and selective and use the past to illumine the present. We should not blindly give up the great values of our

past nor should we cling to beliefs simply because they are ancient. We should accept so much of ancient thought as is sympathetic to us.

No nation is healthy that parts company with its traditions. Social development is an organic process. The continuing influence of the past on the present cannot be ignored. Our art and literature, our law and history, belong to the main stream of our culture. Every Indian student should get to know the main outlines of the history of India, which is not a mere chronicle of dates and defeats, of follies and failures. He should know the lives of the heroes who express the spirits of our civilisation, the seers of the Vedas, the Buddha and Samkara, Asoka and Akbar. A habitual vision of greatness is the way to culture growth. Those who have not greatness in themselves—they are the vast majority—should live in the company of the great. Culture is an attitude of mind, an inclination of the spirit and those who yearn for it and wish to have a vision of greatness, sit in the presence of nobility, see the highest reach and scope of the spirit of man.

10. General Vocational and Professional Education

Democracy depends for its very life on a high standard of general, vocational and professional education. Dissemination of learning, incessant search for new knowledge, unceasing effort to plumb the meaning of life, provision for professional education to satisfy the occupational need of our society are the vital task of higher education.

If we claim to be civilized, we must develop thought for the poor and the suffering, chivalrous regard and respect for women, faith in human brotherhood regardless of race or colour, nation or religion, love of peace and freedom, abhorrence of cruelty and ceaseless devotion to the claims of justice.

We cannot preserve real freedom unless we preserve the values of democracy, justice and liberty, equality and fraternity. It is the ideal towards which we should work... "Utopias are sweet dreams", wrote Kant, "but to strive relentlessly towards them is the duty of the citizen and of the statesmen as well". Universities must stand for these ideal causes, which can never be lost so long as men seek wisdom and follow righteousness.

Major Recommendations

1. Teaching Staff. There be four classes of teachers—Professors, Readers, Lecturers and Instructors. Promotions from one category to another be solely on grounds of merit.

2. Standard of Teaching. The standard of admission to the university course should correspond to that of the present intermediate examination, i.e. after the completion of 12 years of study a school and an intermediate college.

(b) To avoid overcrowding at universities and colleges, the maximum number in the Arts and Science faculties of a teaching university be fixed at 3,000 and in affiliated college at 1,500.

(c) The number of working days be substantially increased to ensure a minimum of 180 in the year, exclusive of examination days.

3. Courses of Study. Without unnecessary delay the principles and practices of general education be introduced, so as to correct the extreme specialisation which now is common in our intermediate and degree programmes.

4. Post-Graduate Training and Research. (a) A Ph.D. student should not become a narrow specialist, but his grasp of his subject should be characterised both by breadth and depth.

(b) University teachers should give the community punctually, efficiency and devotion to duty in relation to their teaching work. and new ideas and newer methods in relation to their research work.

5. Professional Education. (a) **Agriculture.** The study of agriculture in primary, secondary and higher education be given high priority in national economic planning. So far as is feasible, agricultural education be given a rural setting.

(b) **Commerce.** A commerce student should be given opportunities for practical work in three or four different kinds of firms.

(c) **Education.** The course be remodelled and more time given to school practice and more weight given to practice in assessing the students' performances.

(d) **Engineering and Technology.** The number of engineering schools of different grades be increased particularly for training of grades 4 and 5 (foremen, craftsmen, draftsmen, overseers, etc.).

In establishing new engineering colleges or institutes there be fresh, critical inquiry as to the types of engineering service needed in India. Uncritical repetition and imitation of existing institutions here and abroad should be avoided.

(e) **Law.** A three-year degree course be offered in special legal subjects. Students pursuing degree courses in law shall not be permitted to carry other degree courses simultaneously except in a few instances where advanced students have proved their interest and are studying related subjects in law and some other fields.

(f) **Medicine.** The maximum number of admission to a medical college be 100, provided the staff and equipment for that number are available.

6. Religious Education. (a) All educational institutions should start work with a few minutes for silent meditation.

(b) In the first year lives of the great religious leaders like Gautama the Buddha, Confucius, Zoroaster, Socrates, Jesus,

Samkara, Ramanuja, Madhva, Mohammad, Kabir, Nanak, Gandhi taught.

(c) In the second year some selections of a universalist character from the scriptures of the world be studied.

(d) In the third year, the central problems of the philosophy of religion be considered.

7. Medium of Instruction. (a) The Federal Language be developed through the assimilation of words from various sources and the retention of words which have already entered into Indian languages from different sources.

(b) International technical and scientific terminology be adopted, the borrowed words be properly assimilated.

(c) For the medium of instruction for higher education English be replaced as early as practicable by an Indian language which cannot be Sanskrit on account of vital difficulties.

(d) (i) Pupils at the Higher Secondary and University stages be made conversant with three languages—the regional language, the Federal language and English (the last one in order to acquire the ability to read books in English); and

(ii) For the Federal language one script, Devanagri, be employed and some of its defects be removed.

(e) English be studied in High Schools and in the Universities in order that we may keep in touch with the living stream of ever-growing knowledge.

8. Examinations. (a) A university degree should not be required for government administrative services. Special State examination for recruitment to the various services should be organised.

(b) No credit is given, at present for class-work in courses except sometimes in the case of practical work. Such credit should be given.

(c) Three years will be involved for the first degree.

(d) The standards for success at the examination should as far as possible, be uniform in the various universities and should be raised. We suggest that a candidate should get 70% or more marks to secure a first class, 55% to 69% for a second and at least 40% for a third.

9. Students, Their Activities and Welfare. (a) Two years of physical education be required for all students, men and women, except those who are physically unfit or who are in the National Cadet Corps.

(b) Hostels be constructed in blocks of not more than fifty beds per block, with common rooms and dining halls for four five blocks.

(c) University Unions should be as free as possible from political activities.

(d) An Advisory Board of Student Welfare be organised in Universities which do not have such a body.

10. Women's Education. (a) Women students in general should be helped to see their normal places in a normal society, both as citizens and as women, and to prepare for it. College programmes should be so designed that it will be possible for them to do so.

(b) Standards of courtesy and social responsibility should be emphasised on the part of men in mixed colleges.

11. Constitution and Control. (a) University education be placed on the Concurrent list.

(b) The concern of the Central Government with the universities be with regard to finance, co-ordination of facilities in special subjects, adoption of national policies, ensuring minimum standards of efficient administration and liaison between universities and national research laboratories and scientific surveys etc.

12. Finance. The University Grants Commission be set up for allocation grants.

13. Rural Universities. Special attention be paid to the development of higher education in rural areas.

HIGHER EDUCATION AND THE EDUCATION COMMISSION 1964-66

1. Objectives of Universities. In broad terms, the functions of the universities in the modern world may be said to be the following :—

(i) To seek and cultivate new knowledge, to engage vigorously and fearlessly in the pursuit of truth, and to interpret old knowledge and benefits in the light of new needs and discoveries.

(ii) To provide the right kind of leadership in all walks of life, to identify gifted youth and help them develop their potential to the full by cultivating physical fitness, developing the powers of the mind and cultivating right interests, attitudes and moral and intellectual values.

(iii) To provide society with competent men and women trained in agriculture, arts, medicine, science and technology and various other professions, who will also be cultivated individuals, imbued with a sense of social purpose.

(iv) To strive to promote equality and social justice and to reduce social and cultural differences through diffusion of education.

(v) To foster in the teachers and students, and through them in society generally, the attitudes and values needed for developing the good life in individual and society.

(vi) To provide part-time and correspondence courses and extension programmes of various kinds so as to provide varied educational facilities for widening clientele.

(vii) To undertake carefully worked out programmes for school improvement.

2. Selective Admissions. Since the demand for higher education will be much larger than the provision that can be made for it or is needed on the basis of manpower needs, a system of selective admissions will have to be adopted.

3. Part-time Education. Opportunities for part-time education (correspondence courses, evening colleges) should be extended widely and should include courses in science and technology.

4. College Size. A college should normally have a minimum enrolment of 500 and it would be preferable to raise it to 1,000 or more in as many colleges as possible.

5. Education of Women. At present, the proportion of women students to men students in higher education is 1 : 4. This should be increased to about 1 : 3 to meet the requirements for educated women in different fields.

6. Study of Humanities. The need for strengthening the humanities cannot be overstressed. In science education, we shall have to depend inevitably on developments in advanced countries with which we will not be able to catch up in the foreseeable future. To redress the balance, our scholars should strive to make significant contributions to the sum total of human knowledge and experience in the fields of the social and pedagogical sciences and humanistic studies, where our old traditions and the present challenges posed by social development present unique opportunities for creative work.

7. Educational Research. Urgent steps have to be taken to develop educational research and relate it effectively to the formulation of educational policies and improvement of education. It is desirable to set up a National Academy of Education consisting of eminent educationists, broadly on the lines of the National Institute of Science, to promote educational thought and research. An Education Research Council should be set up in the Ministry of Education for the promotion of research.

8. Major Universities. The most important reform in higher education is the development of some 'major universities' where first class post-graduate work and research would be possible and whose standards would be comparable to the best institutions of their type in any part of the world. The UGC should select, as soon as possible, from amongst the existing universities, about six universities (including one of the IIT's and one Agricultural University) for development as major universities.

9. Medium of Education. The regional languages should be adopted as media of education at the university stage in phased programme spread over ten years. At the earlier stage of the undergraduate course, the bulk of the instruction may be given through the regional language while at the post-graduate stage, it may be in English. The teaching of important library languages other than English should be stressed, in particular the study of Russian, on a larger scale.

10. Student Services. Student services are not merely a welfare activity but constitute an integral part of education. These should include orientation for new students, health services, residential facilities, guidance and counselling including vocational placement, student activities and financial aid.

11. Student Discipline. Education should enable young men and women to learn and practise civilized forms of behaviour and to commit themselves to special values of significance. The responsibility for indiscipline taking place is multilateral and no effective solution is possible unless each agency—students, parents, teachers, State Government and political parties—does its own duty. Earnest efforts should be made to remove the educational deficiencies that contribute to student unrest.

The incentive to positive discipline have to come from opportunities that the institution presents to the intellectual and social demands it makes on the students. The whole university life should be treated as one and polarization between teachers, students and administration should be avoided.

12. University Autonomy. The proper sphere of university autonomy lies in the selection of students, the appointment and promotion of teachers and the determination of courses of study, methods of teaching and the selection of areas and problems of research.

13. Role and Appointment of the Vice-Chancellors. The Vice-Chancellor should, as a rule, be a distinguished educationist or eminent scholar with adequate administrative experience. The term of office of the Vice-Chancellor should be five years and he should not be appointed for more than two terms in the same university. All posts of Vice-Chancellors should be whole-time and carry a salary. The retirement age for the Vice-Chancellor should be 65 years.

14. The Inter-University Board. All statutory or deemed universities should become members of the IUB automatically. The degree or diplomas granted by a statutory or deemed university in India should receive automatic recognition from all the other statutory or deemed universities.

15. The University Grants Commission. All higher education should be regarded as an integrated whole and the UGC should

eventually represent the entire spectrum of higher education. The UGC should consist of 12 to 15 members ; not more than one-third should be officials of government and at least one-third from the universities. The responsibility of co-ordinating standards should continue to vest in one body, *viz.*, the UGC. State UGC's should not, therefore, be created. The visiting committees appointed by the UGC should visit each university every three years and work in greater detail and depth.

16. Agricultural Universities. At least one agricultural university should be established in each State.

17. Agricultural Polytechnics. Agricultural polytechnics at post-matriculation level should be organised on a priority basis.

18. A UGC type organisation for technical education with a full-time chairman should be set up with adequate representation from UGC professional bodies, industry and concerned ministries.

Expansion of Higher Education

India today has one of the largest educational systems in the world. The student enrolment in the field of higher education has been in recent years expanding at an average rate of 13% per annum. It rose from 22·19 lakhs in 1967-68 to 24·73 lakhs in 1968-69. During 1969-70 it is estimated to be 27·77 lakhs. This includes enrolment in technical and general education. Enrolment in general education during 1969-70 is estimated to be 19·95 lakhs (males 14·98 lakhs and females 4·97 lakhs). The strength of the teaching staff in the universities and colleges increased from 1·02 lakhs to 1·11 lakhs. We had only 20 universities in 1947. The number rose to 83 in 1970-71. In addition there are 9 institutions deemed to be universities and 4 Institutes of Technology.

Expansion of Higher Education (1946-47 to 1971-72)

Year	No. of Colleges	No. of Universities	Enrolment
1946-47	933	20	1,99,253
1968-69	3,112	76	24,73,000
1969-70	3,295	81	27,77,000
1970-71	3,450	83	31,00,000
1971-72	3,604	85	—

To cope with this extraordinary growth and expansion within the resources available, the University Grants Commission has been making planned and concerted efforts so as to meet the challenge of expansion and the needs for maintaining and improving standards. The establishment of a new university has to be considered in relation to the availability of the essential resources, and the contribution that the proposed universities would make in raising the quality and

standards of education and that no university should be established without prior consultation with and the concurrence of the Commission. The Commission has, however, accepted proposals for the establishment of university centres of post-graduate studies at nine places.

Among the several factors responsible for this vast expansion in higher education after independence, mention may be made of the traditional social status attached to a university degree, for the awakening among the rural people and backward classes who are now seeking social advancement, the keen competition for worthwhile jobs for which higher education becomes the 'optimum' qualification, a rapid opening of new colleges in small and out-of-the-way places, and the absence of adequate employment opportunities for young persons who are forced to go in for university education as they have nothing else to do.

RECENT DEVELOPMENTS

Centres of Advanced Study. With a view to strengthening post-graduate teaching and research in the field of higher education the University Grants Commission has undertaken in consultation with the universities, a scheme for developing a limited number of university departments for advanced training and research in certain selected fields. The scheme is intended to encourage the pursuit of 'excellence' and teamwork in studies and research and to accelerate the realisation of 'international standards' in specific fields. At present 30 university departments (17 in Science subjects and 13 in the Humanities and Social Science) are operating as centres of advanced study in specialised fields on an all India basis. The Department of Education, M.S. University of Baroda, is serving as a centre of advanced study in the field of education. In 1969-70, over 700 schools were engaged in research at different centres of advanced study, and more than 600 research publications were produced by this academic staff.

National Policy. The resolution issued by the Government of India on the Report of the Education Commission titled *National Policy on Education*, has outlined the following principles to promote the development of University Education :

- (a) The number of whole-time students to be admitted to a college or university department should be determined with reference to the laboratory, library and other facilities and to the strength of the staff.
- (b) Considerable care is needed in establishing new universities.
- (c) Special attention should be given to the organisation of post-graduate courses.
- (d) Centres of advanced study should be strengthened.
- (e) Increased support should be given to research in universities.

(f) Part-time education and correspondence courses should be developed on a large scale at the university stage.

Fourth Five-Year Plan. In the Fourth Five-Year Plan, the additional enrolment is estimated to be about one million. The main emphasis during the Fourth Plan will be on consolidation and improvement of higher education through the strengthening of staff and library and laboratory facilities. Facilities for post-graduate education and research will be increased, and the centres of advanced study will be developed. Summer schools, seminars and staff quarters will be provided in the programmes of improving the quality of teaching personnel. The rural institutes will be more effectively linked with the needs of the rural area.

Open University. Open University is a new idea for India. The Ministry of Education and Youth Services in collaboration with the Ministry of Information and Broadcasting and University Grants Commission organised a seminar on Open University from 16th to 19th December 1970, at New Delhi. United Kingdom was the only country in the world where the Open University started functioning from January 1971. As such experts from this University were invited, besides experts from USA, to consider the feasibility of starting an Open University in India. The Seminar was of the view that the time was ripe for India to venture on the experiment of an Open University. It should be designed as a quality institution directed to meet the needs of highly motivated adults lacking the necessary formal qualifications or means of joining a university on a full time basis. The Open University could be viewed as a method of providing education to a mass audience at a reduced per pupil cost, as an attempt at exploiting scarce resources to achieve greater effectiveness, and as a means of new and unconventional methods of instruction and exploiting new technologies.

Problems of Higher Education

I. Economic Aspect of Higher Education

The Robbins Committee on higher education in the UK began its listing of the objectives essential to any properly balanced system of higher education by saying :

"We begin with instruction in skills suitable to play a part in the general division of labour. We put this first, not because we regard it as the most important, but because we think that it is sometimes ignored or undervalued..."

We deceive ourselves if we claim that more than a small fraction of student in institutions of higher education would be where they are if there were no significance for their future careers in what they hear and read and it is a mistake to suppose that there is anything discreditable in this.....

A good general education, valuable though it may be, is frequently less than we need to solve many of most pressing problems....."

The recent statute of the USSR Council of Ministers proceeds further and defines the specific object of the higher educational institutions as under :

"to prepare highly qualified specialists, educated on the basis of Marxism-Leninism, with knowledge of the latest achievements of science and technology at home and capable of utilising modern technology and of creating the technology of the future; to carry out research work that will contribute to sloving problems related to building Communism; to produce text-books and study aids of a high standard; to train teachers and research personnel ; to provide advanced training for specialists with higher education working in different branches of the national economy, culture, education and the health services ; to disseminate scientific and political knowledge amongst the workers ; to study the problems connected with the

utilisation of specialists who have graduated from higher educational institutions and the improvement of the training of specialists".

Prof. V. K. R. V. Rao observes, "Economic development means the creation of a modern and scientific society; and this requires a certain attitude of mind, and a certain code of behaviour which implies a profound change in the human factor. A traditional society does not become an industrial society merely by increasing its skills. Superstition, taboos, and irrationality have to give way to knowledge and reason; and fear and helplessness to self-confidence and positive effort. Science in its most general form has to permeate society, and a scientific temper become the normal determinant of human attitudes to problems of growth and development. It follows, therefore, that university education should be so organised that all who pass through the portals of universities obtain the modicum of knowledge and understanding that is necessary to give them comprehension of the advance of science, the conquest of nature that it has brought, about and the possibilities that it has opened out for the abolition of mass poverty and the universalisation of economic development."

II. Higher Education and Democratic Ideal

Prof. Rao states : "Higher education has also to satisfy the emerging political requirements of our newly formed nation-State and the democratic and socialist society that we want to establish therein. Our graduates constitute the bulk of what we may call the elite in our society. And it is this elite class that has to imbue the masses of our people with the sentiments of a common nationality, a common heritage, and a common citizenship. This they cannot do if they are themselves divided in their minds and hearts by caste, communal, religious, regional, and linguistic barriers. Those in charge of our universities can do a great deal both by precept and by example in instilling in their graduates a sense of Indian identity, cultural unity, and national integration."

III. Selection of Students

Dr. Kothari has said : "A part of the high rate of failure in Indian universities can certainly be attributable to the indifferent quality and, may be, lack of aptitude for university education in an appreciable fraction of the students admitted to the universities."

Dr. Rao thinks : "This effect of increasing enrolment on the quality of higher education sets in motion what may almost be described as a vicious circle. More numbers are not accompanied by correspondingly more and better qualified teachers nor by appropriate additions to libraries, laboratory equipment, buildings, hostels, student homes, and other academic facilities. The result is a further deterioration in quality. We cannot afford to go on in this fashion.

Now that many students come to the university because they
 - no alternative vocational education or immediate employment.
 Now also that there is a deep and understandable desire for higher

knowledge among our student community. I would certainly advocate the expansion of vocational and employment opportunities for those who leave the high schools or the higher secondary schools. I would also press for the establishment and expansion of opportunities for non-formal education, evening colleges, correspondence courses, sandwich courses and the like which will give our young men and women the opportunity to get higher education without crowding the portals of our universities. But the universities have also to play their role and speak up in the interests of improving the quality of their output and the maintaining of their academic standards. They have to press for better regulation of their admissions, even if it involves them in some temporary unpopularity. The University Grants Commission have repeatedly drawn attention to this problem in their annual reports and called for methods by which university education is made available only to those who are most likely to profit by it. In Socialist Russia, out of 2 million students who applied for admission to universities and higher institutions in 1957, seats were provided only for 420,000 entrance examinations lasting over a month being held for the selection of the best students. In Japan, only 18·4% of their upper secondary school graduates were able to get admission in their universities in 1955, with entrance to the universities involving a written examination, a physical test, and recommendation from the school Principal based on the student's entire school record. In the United Kingdom, as we all know, individual universities have their own separate and severe tests for admission. We in India have been relying too long on the results of post-school public examinations and minimum percentage of marks for determining our admissions. We need more of interviews, more of selective tests by individual institutions and universities, and more of reliance on the entire school record of applicants for admission to universities. I think it is high time that we stopped merely talking of restricting numbers and going in for selective admissions, and instead started taking action that will take us concretely in this direction."

IV. Kothari Commission on Enrolments and Programme

Expansion of Facilities in Higher Education. One of the most important features of educational developments in the post-independence period has been the very rapid expansion of professional education in engineering, medicine and agriculture and of science courses for the first and second degrees. This was necessitated by the programmes for economic development undertaken in the first three plans. By and large, this expansion has outstripped the facilities available in real terms and has consequently had an adverse effect on standards. At the same time, there has also been a very rapid expansion in arts and courses at the first degree level. But this has been dictated, *not* by the enrolment capacity of the institutions or the employment opportunities, but by pressure of

public demand which has increased immensely.....In these courses, an attempt has generally been made to manipulate the facilities to meet the demand for higher education rather than to restrict admissions in relation to the facilities available. The effect on standards has been even more adverse...

What should be the enrolment policy in higher education during the next twenty years? Our recommendation is that the expansion of facilities in higher education should be planned broadly on the basis of man-power needs and employment opportunities. At present, there is an over-production of this open-door policy ; and consequently there is a growing incidence of unemployment amongst them. On the other hand there is a shortage of professional specialists and there is a consequent need to increase the facilities in professional courses such as agriculture, engineering, medicine, etc., and especially at the post-graduate stage in science and arts.....

It may be pointed out that—

1. In the first three plans, the enrolments in arts, commerce and science at the undergraduate stage increased by 568,000. During the next twenty years, they are expected to rise by about 1·4 million. The average annual rate of expansion will, however, be reduced from 9·6 per cent to 5·3 per cent.

2. In professional education at the undergraduate stage (including teaching and law) the enrolments increased during the first three plans, by 177,000 ; in the next twenty years, they will increase by 821,000, although the average annual rate of growth would be reduced from 10·6 per cent to 7·9 per cent.

3. At the post-graduate stage, enrolments increased in the first three plans by 86,000 ; in the next twenty years, these will increase by 852,000 and the average annual rate of growth will also have to be slightly accelerated from 11 to 11·5 per cent.....

It is, however, necessary to explain why a large expansion is also needed at the post-graduate stage and in research. An analysis of our proposals will show that this is fully justified because—

1. we expect a proportion of teachers even in lower secondary schools to hold the master's degree ;

2. we have recommended that a master's degree should be the minimum qualification for all teacher-educators both at the primary and the secondary level ;

3. the lengthening of the duration of the higher secondary uniformly to two years and the expansion visualised at this need a very large number of teachers with post-graduate ions ;

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4. the large expansion visualised at the undergraduate and the post-graduate stages itself will need several times more teachers with post-graduate and research qualifications than at present ; and

5. the number of professional persons needed in research, agriculture, industry and the services has to be increased very substantially.

Selective Admissions. During the first three Five-Year Plans, a policy of open-door access has been in operation in courses in arts and commerce in most of the affiliated colleges. A stage has, however, now been reached in the process of expansion when, the policy of selective admissions will have to be extended to all sectors and all institutions of higher education.

Three main elements needed for operating a programme of selective admissions in higher education are—

the determination of the number of places available in an institution in relation to teachers and facilities available to ensure that standards are maintained at an adequate level ; prescription of eligibility by the universities ; and selection by the institution concerned of the best students from amongst those who are eligible and seek admission.

Determination of the Number of Places Available. Each university should decide in advance the number of students to be admitted in each course in its teaching departments and separately in each of its affiliated colleges on the basis of the facilities available. This is already being done for professional and science courses. But even here, it is necessary to make the conditions more stringent. It is even more important to take similar steps in the courses in arts and commerce as well...

It is imperative that the intake of students be fixed separately for each such institution and that this sanctioned strength should form an integral part of the conditions of affiliation.

V. Part-Time and Own-Time Education

At present, a student at the undergraduate stage must either be admitted on a full-time basis or go without education altogether. This creates a great demand for full-time seats in colleges and leads to a deterioration of standards as the resources to provide all the seats needed are not available. One solution to this is to keep full-time seats strictly limited on the basis of resources available and to institute courses etc., for those who aspire to a university degree but are not able to get admission to the regular courses.

The opportunities for part-time education through programmes like evening colleges, and for own-time education through programmes like correspondence courses, should be extended as widely as possible and should also include courses in science and technology (either

at the degree or diploma level). They will help to reduce the capital costs of expanding higher education and cut down even the recurring costs to a substantial extent, especially as enrolments grow. They are the only means to provide higher education to those who desire to study further but are compelled, on economic grounds, to take up employment at the end of the school stage. There need be no fear that they will lead to a deterioration of standards, especially if due care is taken to maintain personal contacts with the students receiving correspondence education by organising academic programmes during vacations, and holidays. In fact, it would be correct to say that, by and large, the standards in such courses tend to be better because of the more intensive motivation of the students. By 1986, about a third of the total enrolment in higher education could with advantage be provided through a system of correspondence courses and evening colleges.

VI. Expansion of Vocational Facilities

"Restriction of admission to universities should also be accompanied by concrete action for expansion of vocational and other training facilities for school graduates as also for opportunities for their immediate employment. Action must also be taken for the establishment and expansion on a substantial scale of facilities for non-formal education."

Development of Education, Agriculture, Engineering and Medicine

A UNESCO publication gives the following percentage figures :—

	<i>USSR</i>	<i>Japan</i>	<i>UK</i>	<i>India</i>
Humanities	Negligible	15·0	30·7	51·8
Education	32·4	11·0	2·0	2·3
Fine Arts	0·8	1·6	0·2	0·4
Law	6·8	10·2	3·6	2·7
Social Sciences	6·4	34·3	5·9	7·6
Natural Sciences	—	4·2	21·7	26·2
Engineering	33·8	13·1	9·6	3·4
Medicine	8·2	6·0	15·6	4·1
Others	11·5	4·4	2·1	1·2

We should not blindly follow the pattern set by either USSR or by Japan. Humanities and pure sciences are certainly important and should find an adequate place in our higher education. But far more important from the functional point of view are education, agriculture, engineering and medicine. Even the UK pattern is better than ours in this respect. No wonder therefore that Dr. Kothari, Chairman of the University Grants Commission, observed in his address to the Vice-Chancellors' conference in 1961 :

"It is apparent from a comparison of the figures for the United Kingdom and India, and also otherwise, that what is required in our case is not so much the expansion of enrolment in pure science, as in medicine, engineering, and agriculture."

VII. Establishment of a Good Society

Prof. Rao thinks : "In the last analysis, I can look at the university only as an educationist. What I seek in the university is the cultivation of the human spirit, the development of the human intellect, the seeking and release of the best in our emotional being. Above all, I see in the university our major instrument for helping us to discover and fulfil our personalities and to lead a full and integrated life as human beings. When we leave the portals of the university after graduation, we must do so as good men and women. When we do, we shall be able to establish the good society." There can be no more all-inclusive nor loftier role for a university than to help the developing society in the direction of a good society. Well can one conclude this address with the wise words of Cardinal Newman :

"If then a practical end must be assigned to a University course, I say it is that of training good members of society. Its art is the art of social life, and its end is fitness for the world. It neither confines its view to particular professions on the one hand, nor creates heroes or inspires genius on the other. Works indeed of genius fall under no art ; heroic minds come under no rule ; a University is not a birthplace of poets or of immortal authors, of founders, of schools, leaders of colonies, or conquerors of nations. It does not promise a generation of Aristotles or Newtons, of Napoleons or Washingtons, of Raphaels or Shakespears, though such miracles of nature it has before now contained within its precincts. Nor is it content on the other hand with forming the critic or the experimentalist, the economist or the engineer, though such too it includes within its scope. But a University training is the great ordinary means to a great but ordinary end ; it aims at raising the intellectual tone of society, at cultivating the public mind, at purifying the national taste, at supplying true principles to popular enthusiasm and fixed aims to popular aspiration, at giving enlargement and sobriety to the ideas of the age, at facilitating the exercise of political power, and refining the intercourse of private life."

VIII. Medium of Instruction and Recommendations of the University Education Commission

1. That the Federal languages be developed through the assimilation of words from various sources and the retention of words which have already entered into Indian languages from different sources, thereby avoiding the dangers of exclusiveness.
2. That international technical and scientific terminology be adopted, the borrowed words be properly assimilated, their pronunciation be adapted to the phonetic system of the Indian language and their spelling fixed in accordance with the sound symbols of Indian scripts.
3. That for the medium of instruction for higher education English be replaced as early as practicable by an Indian language which cannot be Sanskrit on account of vital difficulties.
4. That (i) pupils at the higher secondary and University stages be made conversant with three languages—the regional language, the Federal language and English (the last one in order to acquire the ability to read books in English); and (ii) Higher education be imparted through the instrumentality of the regional language with the option to use the Federal language as the medium of instruction either for some subjects or for all subjects.
5. That for the Federal language one script, Devnagari be employed and some of its defects be removed.
6. That immediate steps be taken for developing the Federal and Regional languages.

(i) A Board consisting of scientists and linguists be appointed to prepare a scientific vocabulary of words which will be common to all Indian languages and also to arrange for the preparation of books in different sciences to be rendered into all Indian languages.

(ii) Provincial governments be required to take steps to introduce the teaching of the Federal language in all classes of Higher Secondary Schools, in degree colleges, and in universities.

7. That English be studied in high schools and in the Universities in order that we may keep in touch with the living stream of ever-growing knowledge.

Kothari Commission on Regional Languages.

In due course, all teachers in higher education should as far as possible, be bilingual and post-graduate students should be able to follow lectures and to use reading materials in the regional language as well as in English.

At the earlier stage of the undergraduate course, the bulk of the instruction may be given through the regional language while at the post-graduate stage, it may be in English.

The classical and modern Indian languages should be provided as elective subjects, no language being made a compulsory subject of study at the university stage.

Development of Modern Indian Languages. Centres of Advanced Study for the development of all modern Indian Languages including Urdu should be established.

Languages other than English. It would be necessary to adopt English as the normal medium of education in the major universities in order to maintain their all-India character.

The teaching of important literary languages other than English should be stressed, in particular the study of Russian, on a larger scale.

IX. University Autonomy University Freedom

The proper sphere of university autonomy lies principally in three fields :

- the selection of students ;
- the appointment and promotion of teachers ;
- the determination of courses of study, methods of teaching, and the selection of areas and problems of research.

Three Levels of University Autonomy

- (1) autonomy within a university, e.g., autonomy of the departments, colleges, teachers and students in relation to the university as a whole :
- (2) autonomy of a university in relation to the university system as a whole, e.g., the autonomy of one university in relation to another, or in relation to the UGC and the Inter-University Board (IUB) ; and
- (3) autonomy of the university system as a whole, including the UGC and the IUB, in relation to agencies and influences emanating outside that system, the most important of which are the Central and the State Governments.

Dr. A. L. Mudaliar, denounced the interference of the Government in 'Times of India,' November 20, 1957 with these words :

"I do not want any autonomy as it is called. In fact, if the truth were to be told, the bearer knows where the shoe pinches. It is not autonomy in any sense at all. Directives are being received from the Ministry of Education in many spheres. Secretaries after secretaries tell us that we must introduce this and that. The communication we receive are such that, if we in the position wanted to follow them all, we would place ourselves of the man, the ass and the little child in Aesop's Fables."

Shri C. D. Deshmukh observed that complete independence has not always led to the best results.

"Often enough autonomy has been responsible for mismanagement and maladministration. It is because of the absence of control that some universities were turned into hotbeds of internal politics and intrigues. Universities, of course, must not be allowed to become additional departments of Ministries of Education. But at the same time the Central and State Governments should have the powers to ensure the maintenance of certain standards and to see that the grants given to universities are properly utilized."

HIGHER EDUCATION IN INDIA— SOME SUGGESTIONS FOR REORGANISATION

Shri J. P. Naik in an article in the Sunday World dated Dec. 26, 1971 posed the following problems :—

- (a) Problems of size, as in Calcutta University, which make good administration almost impossible ;
- (b) Deterioration of standards, especially in the rapidly growing number of colleges of arts, commerce and law ;
- (c) Diminution in the motivation of the students due to poor quality of education, lack of its relevance to immediate problems, and the everwidening distance between a degree and a job ;
- (d) Students unrest : and
- (e) A spiralling increase in educated unemployment.

Suggestions. Mr. Naik made the following suggestions :

A. Access to Higher Education.

(1) Selective Sector : Expanding the sector of institutions operated upon a selective basis and introducing a significant element of social justice therein.

(2) Non-selective Section Reducing the economic incentives which artificially heighten the demand for higher education.

(3) Maintenance of proper standards in undergraduate affiliated colleges through prescription of proper conditions of affiliation and their rigorous enforcement and the development of correspondence courses on a large scale and the establishment of an open university.

(4) Delinking of the compulsory subsidy from public funds to mere expansion of facilities at the undergraduate stage and provision of fee-grants to students on principles of merit and social justice.

B. Structure of Higher Education.

(5) Restricting the work of the universities mainly to post-graduate teaching and research.

(6) Establishment of Boards of Collegiate Education for metropolitan cities and separately for each State to grant affiliation to colleges and award the first degree.

(7) Creation of autonomous colleges on a large and effective scale.

(8) Establishment of special Research Institutes as Centres of excellence.

C. Quality of Higher Education.

(9) Reform and upgrading of curricula on the principles of significance and relevance ; adoption of dynamic methods of teaching and evaluation.

(10) Preparation of instructional materials, in-service education of teachers and special programmes of student aid.

Student Unrest

J. P. Vinayak, in an article in the Hindustan Times dated 27.12.70 gave the following statistics :—

Out of 86 universities in India 48 universities were not affected by student strikes and agitations during the year 1968. According to the State-wise analysis, it was noticed that no single State was free from students strikes and agitations during the year 1968, and the most important factors leading to student disturbances were adjustment in relationships and off-campus issues in Andhra Pradesh, economic issues in Assam ; examinations in Bihar ; economic factors in Gujarat ; examinations in J and K ; off-campus issues in Kerala ; economic factors in Madhya Pradesh ; off-campus issues in Madras, Maharashtra and Mysore ; economic factors in Orissa ; off-campus issues in the Punjab; examination, economic factors and off-campus issues in Rajasthan : off-campus issues in U.P. adjustment of relationships and off-campus issues in West Bengal; and off-campus issues in Delhi.

The largest number of cases of student indiscipline occurred in the month of November followed by cases in March, September and January. During the period January to June, 1969, there was widespread student agitation in Andhra Pradesh in connection with the demand of Telengana ; and in Madras in connections with A.I.R. timings and anti-Hindi agitation.

Highest Unrest in U.P., West Bengal, Bihar and Punjab

A State-wise comparison of the cases of student unrest is revealing. In many cases of student unrest during the period 1965-68, Uttar Pradesh, West Bengal, Bihar and Punjab topped the list, in the stated order. The cases of student unrest reported these four States constituted about half the total number of in the country in that period. Of University student enrolment 1965-68, Uttar Pradesh had the highest. Maharashtra, West Bengal, Bihar and Kerala came next, in this order. Punjab was only

the eighth in this respect but it was fourth is the case of student unrest. But, of course, students population in a State cannot be regarded as a uniquely determining factor of student unrest in that State.

Perils of Invigilation. 'The Indian Express' in a recent editorial survey of student violence gave examples of assault, battery and murder which add up to a tale of absolute horror.

"While an invigilator was shot dead at Moradabad", we read, "another was done to death at Agra by students wielding lathis and knives in defence of their right to cheat. Grisly as these incidents are, they appear relatively mild compared to the shocking way in which the aged mother-in-law of a school teacher in Jhansi was axed to death by examinees who wanted to wreak vengeance on the son-in-law for refusing to upgrade their marks. At Jaunpur, students set fire to a College building after they had been told off for cheating. In Amroha, examinations were supervised with the help of the Police and the district Magistrate. At another examination centre in U.P., an examinee used an Alsatian to keep off the invigilator while he copies from text-books." Other crimes of a similar nature not listed here include the attack on a Professor of Bareilly College, the murder of a VicePrincipal at Mainpuri and the shooting of a Chemistry Lecturer at Moradabad.

MURDER IS A MATTER OF DEGREE

Commenting upon the student unrest, strikes and violence in the country the "Hindustan Times" observed in its editorial on 24.4.1971 under the caption "Murder is a matter of degree".

"Human sacrifice has been banned in the country for several decades now. But rituals die hard, and substitutes are easily found. The most recent and macabre substitute is the ritual of students sacrificing principals of colleges and invigilators in examination halls in their relentless pursuit of the externalia of higher education. On Monday, there was one more instance of this. The Principal of Rajendra College, Chapra (Bihar), was killed by a group of students in this office in broad daylight, while an invigilator who tried to do the job for which he was being paid escaped with minor injuries. No doubt this is meant to go out as a warning to all invigilators and principals. "If you care for your skin, don't try to stop us from cheating." And if cheating in examinations does not produce the required results, no doubt a similar fate awaits those who mark examination papers.

Each time students indulge in these barbaric rituals, civilised society reacts with an elaborate ritual of its own. A loud tuttutting, the usual newspaper editorials, an appeal for severe punishment of the offenders, an inquiry committee : and then all is forgotten once again till the next incident. But these incidents are getting more and more frequent and there are clearly no easy short-term solutions to

the problem. In the face of this, Indian society has yet to ask some fundamental and awkward questions. What makes apparently normal young people equip themselves with spears, rush into their principal's officials and plunge their wretched weapons at an unarmed, helpless man? If these young men are mad, then there are a lot of mad people knocking around in Indian universities. If they are not mad in the medical sense of the word, then they must be facing enormous mental and social strains and stresses to so blatantly disregard all rules of civilised behaviour.

The lame, if blame must be apportioned, lies with the system, University education is a totally meaningless exercise for the vast majority of Indian students. Education in the sense in which it is commonly understood is rarely imparted. The only concern of students is to pass their final examinations because without a piece of paper that entitles them to some mystic alphabets after their names, there is usually not even the prospect of a clerk's job. The piece of paper is usually granted not on fair test, of intelligence but of memory and yet assumes an importance that is totally unrelated to its real worth. To obtain that piece of paper—a passport for a job—it would seem students are willing to rob, cheat and kill. As the Education Commission recognised a long time ago, this is a problem that cannot be tackled without a radical overhaul of the entire educational structure and the social values that go with it. "Higher education" in the sense in which it prevails now is a luxury the country cannot afford since its sole purpose seems to be to make up for the failure of the secondary school system. If schooling is improved and upgraded, then the bulk of matriculates can and should be put through vocational training in specialised institutes that gear their admissions to practical manpower requirement in the economy. This would require elaborate manpower planning, an area grossly neglected in the past but one that should immediately occupy the attention of the new Ministers of Education and Planning."

Causes of Student Unrest

An Acute Problem. The problem of student unrest is getting more acute as days pass by. According to a survey made by the University Grants Commission, there were 234 notable cases of student unrest in Indian Universities and affiliated colleges during the period 1965-1968.

Two fold classification of the grievances of students. Causes of unrest may be classified as under.

1. Grievances against educational authorities.
2. Grievances against public authorities.

I. Grievances Against Educational Authorities. This includes problems like :

1. Examination system.
2. Curriculum of Study.
3. Tuition fees.
4. Hostel Accommodation.
5. Admission Rules.
6. Behaviour of Teachers, etc.

It was observed that during the period 1965-68 only 36·3 p.c. of the cases of student unrest emerged from students' grievances against educational authorities. Of these, 22·4 p.c. were related to the present examination system, 12·9 p.c. were related to hostel accommodation, 7·1 p.c. were associated with tuition fees, etc. Cases indicating protest against the behaviour of teachers added up to 9·4 p.c. of the total number of academic grievances, a significant point worth noting.

II. Grievances Against Public Authorities. This included :—

7. Dislocation in the set-up of administrative affairs in the country.
8. Absence of adequate facilities for employment.
9. Protests against police excesses on students.
10. Protest against discussion or actions taken by the Government on certain issues.

63·7 p.c. of the cases of student unrest in the country were due to the students' grievances against public authorities. Evidently life among the students is very much affected by happenings outside the campus. Students in many colleges protested against U.S. policy on Vietnam, the Kutch tribunal award, the Government's language policy etc. The students of a few other colleges protested against stiff question papers, demanding scrutiny of answer books in the presence of their representatives. Cases of protest against police excesses were significantly large. They made up 16·1 p.c. of the total number of cases of student unrest due to grievances against public authorities in 1965-68.

Kishore Gandhi in an article in 'The Hindustan Times' dated 13.2.72 outlined the following cases of student unrest in the country :—

1. Lack of proper academic atmosphere.
2. Lack of respect for authority—parental, educational and governmental.
3. Ideological frustration.
4. Political interference.

5. Normal degeneration of our youth.
6. Failure of the old generation to set an example of good behaviour and dedication to duty.
7. Loss of belongingness.
8. Corruption at the highest echelons of administration.
9. Non-involvement of students in campus affairs.
10. Lack of motivation among students.
11. Lack of commitment on the part of University teachers to the inculcation of knowledge of its expansion.
12. Mushroom growth of educational institutions and lack of facilities.

Favouritism in Institutions of Higher Learning and 'Youth Revolt'. Uma Prasher in an article entitled 'Youth in Revolt' in the 'National Herald' dated 14th September, 1968 made the remarks, "It is easier for a camel to pass through the eye of a needle than an above average student to pass through the gate of even second grade faculty by sheer merit. The harassed parents are about trying to find the man or woman who can push past the progeny beyond the portals of the university. Boys and girls who have received high marks in the examination can hardly feel proud of their achievement so deflated they are with the processes of the admission. They start university life with an element of disillusionment.

University for most of them is a dark alley beyond which they dimly see a mad rat race while they hear stories of rank favouritism. Some of them become perpetual students entering one faculty after another and bedeviling university politics. They help spread dissatisfaction amongst the adolescent fellow students and fan student grievances. Any teacher student participation in university administration, in the circumstances, may not be as fruitful as some educationists imagine. They wish to do something, to have the feeling of recognition. And they become a prey to the rule of extremist elements who dangle before them political El Doradoes of right or left. There are strikes, there are marches and there are revolts against authority. It gives them a sense of importance, of fulfilment.

One public activity which pervades society is politics and university politics sometimes can be more sickening than the rest because academics indulge in it. Anyway, politics has a bad image in the minds of the youth. They distrust its leadership and the politician is held in low esteem because popular democracy is temperate corruption.

The governing generation which should convince the young that this is a society open to originality, energy, talent, dissipates its own

energies in ingenious plans to hold on to power. It has to change its ways and prove to the professor and the kid that democracy does not have to corrupt or bore.

Student Union as Perpetrator of Student Unrest. N. N. Sachitanand in an article entitled "what is the alternative to students' Unions" which appeared in "The Hindustan Times" dated Feb. 19, 1967 observed, "A PRINCIPAL perpetrator of student unrest in India today is the Student Union. This institution has been a total failure in all its purposes, whether it be collective bargaining on behalf of the students, student welfare or inculcating a sense of responsibility in the student community. In short, its name is mud with educational authorities, the general public and even with the students themselves."

The reasons are not hard to locate. The very concept of the Studen Union is, first of all, entirely inappropriate to the atmosphere of education. It smacks of trade unionism and education is definitely not an industry, no matter what the satirists may say about our colleges being 'degree factories.' The student is in the university not to earn but to learn. All talk about 'bargaining' for the number of study hours, the percentage of pass marks, the 'stiffness' of examination questions is sheer nonsense.

Basic Needs

This does not necessarily mean that there should be no representative body of students. This is not feasible with the gigantic proportions to which educational institutions have grown today and the very meagre staff-student ratio on the campus, College authorities will find it rather difficult to gather information about student opinions and the various difficulties faced by them.

What is basically required of a student representatives body ?

- (a) Capability of logically discussing issues with college authorities.
- (b) Shouldering responsibility of handling students' affairs and maintaining discipline in the student community.
- (c) To institute and initiate activities in the interest of students.
- (d) Helping the college authorities in the management of the institution, including handling of college functions.
- (e) To initiate moves for more report between staff and students and even suggest improvement in teaching methods.

It will be noticed that all the above functions are hinged on one quality—responsibility. This makes it essential that the representatives be students of merit and integrity. A general election of office-

bearers is, therefore, precluded. A better system would be for the class teacher of each section to nominate three or four candidates in his section.

The Tragedy of Higher Education

Commenting on higher education under the above cited caption, 'The Hindustan Times' observed in its editorial on fifth October, 1970."

Universities all over the country have become stamping grounds for politicians and some so-called public men. Meanwhile, academic values have gone to ruin and standards of learning have fallen to abysmal levels with none in authority worried in any degree that one can see. The Education Commission's Report is gathering dust and harassed principals and vice-chancellors have to deal with a few students who do not want to learn rather than with the many who do, and with teachers who would sooner intrigue than teach. In an atmosphere so hostile to learning and teaching, and with a educational system so irrelevant to needs and aspirations, Vice-Chancellors with conviction can only be heroic failures—unless there is an "environmental change."

Remedial Measures

Writing about remedial measures in the present situation, Kishore Gandhi felt :

"The situation, though pessimistic, need not disappoint us, because all is not lost yet. Our students are essentially good and sound in heart. They are capable of making a constructive and creative contribution to their own well-being and promoting national welfare. We need to treat the students as adults, give them respect and channelise their latent potentialities for the reconstruction of the nation. Students' involvement in matters relating to welfare activities, hostel management, sports and union affairs should be encouraged. But in academic matters teachers should help them and guide them.

We should treat the university as a unit. Any attempt at polarisation and conflict between teachers, students and the administration should be avoided. What is needed at this critical juncture is to generate a climate of fraternity among students, teachers, and vice-chancellors based on mutual respect and understanding and allegiance to the pursuit of truth and excellence in the common cause education."

Inexcusable Procrastination and Reform in Higher Education

'The Hindustan Times' observed in an editorial under the caption 'Inexcusable Procrastination' dated 15.4.72 :—

There will be deep disappointment over the very tame reply Professor Nurul Hasan to the debate on the Education Ministry's

demands. The Minister shared the feelings of Members regarding the inadequacies of the present system of education. But he had nothing to offer—only patience. He declined to make any statement on the reform of higher education as the matter was yet to be considered by the UGC and the Inter-University Board. This is evading the issue for the entire question of educational reform has been hanging fire for at least six years, since the Education Commission submitted its report. Meanwhile, numerous committees, conferences, seminars, study groups and workshops have endlessly debated what should be done and there the matter has rested. There is no ideal solution and it is futile to cogitate any more in the hope of coming up one day, some day, with the perfect answer. The situation does not brook any further delay. What is lacking is not information or ideals but the political will to act.

University after university is breaking down : Calcutta, Patna, Sagar, Bangalore, Jodhpur, Agra, Allahabad—to mention some of those that have been in the news. But universities and Vice-Chancellors cannot work miracles on their own. They have to function within a framework of policy determined by the Government. The only way out of the mess would seem to be for the Prime Minister to convene a meeting of Chief Ministers and leading school and university educationists to thrash out the alternatives and arrive at some broad conclusions on key issues on which the Central and State Governments should then take immediate decisions.

The pundits will throw up their hands in horror at the suggestion that educational policy can or should be decided in such a hurry. They would be quite wrong. The country has wasted year in futile discussion and drift on a matter of supreme importance on which its future so intimately rests. How dare the present ‘leaders’ and ‘educationists’ condemn India to suffer the consequences of their sorry indecision for the next two generations ? Educational planning is the most vital ingredient of the national plan, for it is concerned with the minds of men. The excuses for educational neglect have become intolerable and will no longer be countenanced. Educational reform in a country the size of India is obviously immensely difficult. All the more reason to begin here and now.”

STUDENT PARTICIPATION AND ALLIED MATTERS

Final Recommendations of the Vice-Chancellors' Conference New Delhi, April 21-23, 1969

Student Participation

(a) The genuine needs and difficulties of the student community must be carefully and sympathetically considered and a consultative machinery devised, so that the authorities in the universities and colleges could discuss periodically and regularly with students, their needs and problems, in order that remedial action.

could be taken expeditiously. A determined effort has to be made to avoid polarisation between teachers, students and administration, and necessary steps taken to build up an atmosphere of harmony and mutual understanding.

(b) Effective and meaningful student participation has to be secured in the management of hostels, student homes/non-resident student centres, canteens, libraries/reading rooms, sports and games, cultural programmes, etc.

(c) Student opinion should be taken into account regarding the provision of such essential physical facilities as hotels, student homes, canteens, etc., in the future development programmes of the universities.

(d) It has to be the endeavour of the authorities in the universities and colleges to secure the active co-operation of students in the maintenance of discipline. Cases of serious acts of indiscipline, if and when they occur, could be considered, wherever necessary, by a small discipline committee with some students on it.

(e) As the question of student participation in university/college statutory bodies is related to the larger question of university/college governance, it may be referred to the working group to be set up by the UGC to consider the governance of universities and colleges and allied matters.

National Service Corps

(a) The proposal for introducing the scheme relating to national service corps at university level was welcomed but it was felt that in view of the meagre resources available and the nature of the programmes the scheme should be introduced on a voluntary basis in selected institutions in a university.

(b) For proper and effective implementation of the scheme, the choice of programmes and selection of institutions, teachers and students may be left entirely to the universities.

(c) The proposal for organising youth peace corps (Tarun Shanti Sena), as suggested by the National Committee on Gandhi Centenary programme, could be included as one of the suggested programmes under national service scheme.

(d) The central assistance for the national service corps should be raised from 66½% to 75% and that this may be remitted to the university. It should be the concern of the university to meet the remaining one-fourth either from the State Government grant or its own resources.

A flexible financial procedure would be necessary for implementation of the scheme. Central assistance to the universities should be routed through the UGC.

National Sports Organisation

The proposed allocation of 10% earmarked for pursuit of excellence in sports should be raised to at least 20% for better organisation of coaching and other programmes on a sustained basis.

Adult Education

1. The removal of illiteracy has to be an important part of the national social service scheme. It will be necessary to arrange some orientation courses for literacy workers.

2. Apart from students and teachers, retired persons could also help in the literacy campaign. (The committee noted that the services of retired army personnel would be available for the purpose.) In the literacy programme special attention has to be given to the education of women and the people in the rural areas. It will be useful to acquaint people in the rural areas with new agricultural practices and techniques.

3. Suitable literature for neo-literates has to be prepared.

4. It would be desirable for universities to have some organisation for promoting adult education as well as part-time courses to the needs of the community. A department of adult education/continuing education, especially for the training of technicians and middle-level professional workers, could be established for this purpose in the universities.

5. Extension work in various fields could be undertaken by universities, particularly agricultural universities, for the benefit of the rural people.

Organisation of the Student Conference (May 1969)

A conference of student representatives, convened by the Ministry of Education and Youth Services, and the University Grants Commission, was held in the Delhi School of Economics, Delhi University on May 23-25, 1969. The conference was attended by student representatives from 51 universities and nine institutions 'deemed' to be universities, three institutes of technology, and the All-India Institute of Medical Sciences, New Delhi. It was inaugurated by Professor V. K. R. V. Rao, Minister of Education and Youth Services. The Chairman, University Grants Commission presided.

Three Committees of the Conference

The conference divided itself into three committees. The committee on education and student participation met under the chairmanship of Shri Ajit Singh Chadha, Delhi University with Shri Anil S. Navale, M. S. University of Baroda, as co-chairman. The committee on employment opportunities ... problems, had

Kumari Sudha Bhatnagar of the Vikram University as its chairman and Shri K. Vijay Rao, Birla Institute of Technology & Science, Pilani, as co-chairman. Shri V. I. Sequeria, Tata Institute of Social Sciences, Bombay, was chairman of the committee concerned with the role of student advisory bureaux and employment information and guidance bureaux, national service scheme, and the role of student organisation in university life.

REPORT OF THE COMMITTEE ON STUDENT PARTICIPATION, CURRICULUM AND EXAMINATION REFORM

Student Participation

1. Participation in Academic and Administrative Affairs. The committee recommended effective student participation in the academic and administrative affairs of universities and colleges.

2. Management of Co-curricular Activities. Student representatives should have the right and responsibility of managing all co-curricular activities and programmes of student welfare. These should be under complete student management with appropriate assistance/guidance from university or college authorities. Suitable machinery for student management of these activities should be devised, where it does not exist at present, and steps should be taken to ensure effective and active student participation in these areas. The money spent on these activities should be with the approval and counter-signature of the student representatives concerned.

3. Student Representation in the Decision Making Statutory Bodies. The committee accepted the principle of effective student representation in the decision-making statutory bodies of universities and colleges. It was recommended that effective student participation in the senate/court, as full members with full powers, is necessary. The committee also supported student representation on the governing bodies/committees of management of colleges. Educationists, teachers and students only must form the governing body.

It was felt that while student representatives may not participate in matters relating to the conduct of examinations, evaluation of student performance, appointment of teachers and other secret matters, their participation should be ensured in all other academic and administrative decisions taken by these bodies.

4. Student's Consultation Relating to Curriculum and Examination Reform. Students must have a say in matters relating to curriculum and examination reform, structure of courses and allied matters.

5. Student's Opinion in the Assessment of the Performance of Teachers. Student opinion should be sought in the assessment of the performance of teachers and, in this connection, it was suggested

that a secret *pro forma* should be circulated to the students and their opinion elicited at regular intervals. This would be helpful to the departments as well as the teachers concerned to improve their work.

6. Formation of Discipline Committee. For dealing with the cases of breach of discipline by students within the university/college campus, a discipline committee should be constituted with 50 : 50 representation for teachers and elected student representatives.

7. Code of Conduct for Students and Teachers. It would be advantageous to have a proper code of conduct for students and teachers.

8. Joint Consultative Committees. Apart from student representation on the statutory bodies, there was an urgent and pressing need for joint consultative committees consisting of representatives of teachers and students who would be responsible for day-to-day administration in the university departments/colleges.

9. Matching Grants for Union Activities. The UGC should make available suitable matching grants for the activities of student unions in addition to their own resources (*i.e.* membership contributions).

10. Democratically Elected Union in Every College. There should be a democratically elected union in every college and university with compulsory union membership.

Immediate Implementation

The committee expressed the hope that these suggestions would be implemented during the next academic session without referring them to more committees/sub-committees.

Curriculum and Examination Reform

1. Reform in the Education System. The present educational system was outmoded and was not attuned to the needs of society. The syllabi prescribed, the methods of teaching and the examination system were also outdated and needed drastic improvement. The courses should be directly related to socio-economic conditions in the country.

2. Modernisation of the Courses of Study. The courses of study should be reviewed and modernised. An attempt should be made to have uniform courses of study throughout the country.

3. Uniform Pattern of Structure. There was an urgent need to evolve a uniform pattern of structure of education in various courses. This would *inter alia* facilitate the mobility of the students, who sought admission to other universities.

4. Diversified and Employment Oriented Courses. There was a pressing need for diversified and employment-oriented courses.

5. Reform in Methods of Teaching. The following recommendations were made :

- (a) **Guided Reading and Discussion Method.** Under the existing system there is an emphasis on formal lectures. The lecture method should be used most sparingly. It should give place to guided reading and discussion method.
- (b) **Round Table Discussion.** Class-room lectures should change into round-table discussions with a view to ensuring a two-way participation in instruction.
- (c) **Assignments.** Individual and group assignments should be given, evaluated and discussed frequently to provide help for better learning.

The practice of dictating notes, which encouraged cramming should be dispensed with, and lectures should be carefully planned and co-ordinated. Cyclostyled synopses of lectures and suggestions for further reading should be supplied to students in advance. The staff-student ratio in many university departments/colleges was highly unsatisfactory and needed improvement.

Reform in Examination.

The following recommendations were made :—

- (i) **Examination Lead to Development of Higher Abilities.** The system of examination should be so modified as to discourage selective study. It should lead to the development of higher abilities and not memorisation. Different forms of questions found suitable for testing various objectives ; as also the course content, should be used.
- (ii) **Evaluation a Continuous Process.** Evaluation of students' progress should be very comprehensive and also continuous.
- (iii) **Improvement in the Quality of Question Papers.** The quality of question papers, as also other aspects of the examination system, should be so improved as to make it more reliable and valid. The universities should avail themselves of the latest expertise available in the field to the best advantage of the students.
- (iv) **Objective Tests.** The system of examination has to be modified and improved. More emphasis should be given to objective tests and problem-oriented questions.
- (v) **Spacing out Examinations.** The examinations be properly spaced out. Provision has to be made for continuing assessment of student performance through periodical tests throughout the year. In any case, examinations should not be memory-oriented.

- (vi) **Diversified Courses.** No scheme of examination could be divorced from the course of study. Therefore, without a proper scheme of diversified courses and provision of flexibility any scheme of examination reform would mean only increasing the number of examinations, which would do more harm than good to the students. A proper scheme of diversified and job-oriented courses should be drafted and implemented along with examination reform, to enable the students to select a number of independent courses in each semester.
- (vii) **Vigilance Committee.** A proper machinery should be set up to keep a regular check against any partiality or favouritism playing a part in the examination system. For this a vigilance committee may be set up which should permanently look after the working of examination in various colleges and faculties.
- (viii) **Viva Voce.** Examinations should be strengthened by the introduction of *viva voce*.
- (ix) **Fictitious Roll Numbers.** It was desirable to adopt double fictitious roll numbers by the examination branch of the university to allay misgivings about the identity of scripts.
- (xi) **Appointment of Examiners.** The university authorities should lay down a fool-proof system of appointment of examiners specially at the post-graduate and honours levels. The rules of moderation should be so framed as to see that no injustice is possible. It would be necessary to refer each script to two examiners and both of them should give their evaluation independently and secretly. The two result sheets should then be moderated by independent moderators who may review cases of discrepancies in each question. This would remove any chance of favouritism or subjective prejudices working against a candidate.
- (xi) **System of grading.** The system of assessment by grading rather than by numerical marking of students' performance offer many advantages and could be experimented with at selected centres.
- (xii) **Abolition of Compulsory Attendance.** The system of compulsory attendance should be abolished at the post-graduate as well as undergraduate levels.

Report of the Committee on Employment Opportunities and Related Problems

- (1) **Discouragement of Foreign Investment.** The committee suggested that foreign enterprise and investment should be discouraged.

(2) **Encouragement of Public Sector.** The Government's endeavour should be to encourage the public sector and bring all the sectors under public control.

(3) **Right of Employment as Fundamental Employment.** The right for employment should be recognised as a fundamental right of every adult citizen of India.

(4) **Education and Unemployment.** Problems of educated and unemployed, and uneducated and unemployed could not be viewed in isolation from each other. Educated unemployment was better than uneducated unemployment and therefore the Government should encourage the development of education.

(5) **Rural Area Development.** The emphasis should shift to the rural areas and agriculture should be given primary importance. Graduates should offer themselves for work in rural areas.

(6) **Increase in Investment in Education.** Investment in education as a proportion of the national income should be increased considerably.

(7) **Job-oriented Educational System.** The educational system should be job-oriented and linked to employment needs. Greater emphasis should be placed on the introduction of vocational subjects in the degree course, such as secretarial practice, stenography, management, etc.

(8) **Ceiling on Land-Holding.** Government should put a ceiling on land-holdings and distribute land among the unemployed. Financial assistance should be provided for the cultivation of land. Unemployed persons should be encouraged to work on uncultivated land.

(9) **Manpower Utilisation.** India in its present situation should harp on utilisation of manpower and not on automation.

(10) **Ceiling on Expenditure.** There should be a ceiling of Rs. 1,500 per mensem on the expenditure of an individual.

(11) **Maximum and Minimum Salary Rate.** The ratio between the maximum and minimum salary should be 10 : 1.

(12) **Encouragement to Small-Scale Industries.** Schemes relating to small-scale industries, workshops, fine arts, crafts and such other enterprises should be encouraged on a co-operative basis.

(13) **Inter-religious Marriages and Job-Preference.** In order to break the bonds of casteism and communalism, people going in for inter-caste, inter-state and inter-religious marriages should be given job preference.

(14) **Abolition of Privy Purses.** The government should abolish privy purses and use the money thus saved for economic growth and development of the country.

(15) **Encouragement of Co-operative Stores.** Co-operative stores and co-operative farming should be encouraged.

(16) **Army Service.** There should be compulsory 'drafting' into army for all students.

(17) **Research.** A central pool should be created for enabling graduates to undertake research.

(18) **Food Armies.** Food armies should be set up to plough the vast waste-land in the country.

(19) **Social Service Corps.** Social service corps should be started on the lines of the peace corps.

(20) **Part-time Employment.** Universities should make efforts to help in finding part-time employment to needy students and to bring students in close contact with their prospective employers.

(21) **Association of Students with Various Committees.** Students should be associated with the deliberations of the committees appointed by the State Governments and Central Government to examine the problem of unemployment.

(22) **Loans to Engineers and Others.** Government should give loans to engineers and others to create self-employment by starting small-scale industries.

(23) **Compulsory Rural Service.** Compulsory rural service should be prescribed for agricultural and medical graduates.

(24) **Allowance for the Unemployed.** The Government should provide allowances to the unemployed.

Report of the Committee on the Role of the Student Advisory Bureaux and Employment Information and Guidance Bureaux, National Service Scheme and The Role of Students Organisations in University Life.

The Role of Student Advisory Bureaux and Employment Information and Guidance Bureaux in Universities.

The committee generally agreed with the recommendations of the UGC Panel on Employment Information and Students Service Bureaux, and made the following recommendations.

(a) **Bureau in Each University.** Each university should have an employment information and guidance bureau. Universities may follow the model of the department of placement set up by the IIT's, with suitable modifications to suit local conditions.

(b) **Qualities of the Employment Officer.** Persons to be appointed to the key post of employment officer require necessary background and ability to establish liaison between industries and other employing agencies on the one hand and the universities on the other. This may be kept in view when planning the organisation of the bureaux.

(c) **Continuous Flow of Information.** Each university must make itself responsible for a continuous flow of employment information to its affiliated colleges. In this connection, the committee would like to invite attention to the working of the Bombay University Employment Information and Guidance Bureau and its impact on the students in the colleges. Particular attention is invited to the system of obtaining vacation employment for needy students.

(d) **Liaison with Industries.** Liaison with industries and other employing agencies should be established by all universities and departments, primarily with a view to informing the students regarding job opportunities and acquainting the industry with the kind of students being trained in the universities at present.

(e) **Admission Process.** In each institution, the professors should be made responsible for co-ordination of efforts by the students to obtain admission/fellowships in other institutions as well as in regard to obtaining jobs to avoid duplication.

(f) **Assistance from Ex-students.** The employment bureau should also collect regular information regarding placement of ex-students with a view to obtaining their assistance in placing present students.

(g) **Information on Manpower Opportunities.** Information on employment opportunities and manpower requirements could be greatly improved by involving university faculties and students in collecting detailed data at the local levels and there was a pressing need for such information in order to make calculations regarding manpower requirements more realistic. Such studies could be undertaken by students either as a part of their academic programme or as vacation jobs on payment of suitable remuneration.

National Service Scheme

1. **Voluntary NCC Membership.** Membership of the NCC should be voluntary and students should be free to continue as members as long as they desired during their university career.

2. **National Service Scheme.** The National Service Scheme could be a powerful instrument of national integration. It could be used to introduce urban students to rural life as well as students from one State to life in other States. Under this scheme projects of permanent value could also be undertaken as a symbol of the contribution of the student community to the progress and upliftment of the nation.

3. **Social Service Projects.** The projects could be formulated by committees of teachers and students at the institutional level, giving full freedom to the students in choosing the kind of project service that they would like to be associated with. While designing

such projects, the specialised fields of studies and aptitude of students may be taken into consideration.

4. Projects on Inter-State University Basis. These activities should synchronise, as far as possible, with festivals, typical of the area where they are undertaken. The aim should be to combine work with enjoyment, and learning something of the customs and cultural heritage of the area. As far as possible, such projects should be undertaken on an inter-state/university basis.

5. Encouragement of Exchange of Students. Systems and institutions which obstruct students migrating from one state/university to another should be discontinued, as early as possible. For the sake of national integration, exchange of students between universities should be encouraged and reservation of seats for students coming from other areas, on a reciprocal basis, should be adopted by the universities.

6. National Integration. Students should resist every attempt to divide India on regional, linguistic or communal lines. This would be the most lasting contribution that the student community can make to India's progress.

Role of Student Organisations in University Life

The committee made the following recommendations :

(a) **Union in Every University.** There should be student union/*chakra sangh* in every university. It should be called 'union'.

(b) **Democratic Constitution of Unions.** The unions should have democratic constitutions which should be, as far as possible, uniform. Where such bodies do not exist, immediate steps may be taken to bring them into existence through the good offices of the UGC/Ministry of Education. To be represented is the birthright of every student and obstructions in its way from any quarter should not be entertained. Suitable premises for the union should be provided by the university concerned.

(c) **Automatic Membership.** Membership of the unions should be automatic as recommended by the Education Commission (1964-66).

(d) **Funds Under the Charge of Unions.** The funds of the unions should be under their own charge. Where such a practice does not exist at present, steps may be taken to transfer funds to the unions.

(e) **Adequate Financial Assistance by UGC.** The fields of activities of the unions should cover student self-government and allied matters and organisation of extra-curricular activities, such as sports, scientific, literary and cultural activities, etc. Adequate financial assistance should be provided to the unions or their affiliated societies by the universities and the Universities Grants Commission.

(f) **Publication of a Periodical.** A periodical may be published to circulate information regarding the organisation and constructive activities of these bodies, for the general information of the student community all over the country.

(g) **Yearly Meeting of the Representatives of Unions.** Representatives from student unions should meet once a year in different parts of the country under the auspices of the UGC. Invitations for such conferences should be sent directly, to the presidents and secretaries of the student unions, with copies to the vice-chancellors.

Expansion of University Education

Colleges in India. Prior to the British rule the higher education of the Indians was in the hands of Pandits and Maulvis. It was part of the tradition of Indian scholarship that places of study were also places of residence, and the teacher exercised a paternal care and authority over his pupils. During the British rule, the earliest college providing higher education and spreading Western knowledge was founded in Calcutta in 1782. The government colleges in Bombay and Poona date from 1821 to 1827. There was an unprecedented expansion of collegiate education after Independence. The number of colleges during 1971-72 was 3450 and the total student enrolment in the universities and colleges in 1970-71 was estimated to be about 31,00,000. The number of colleges rose to 3604 during 1971-72.

Universities in India. In 1857, Universities were established by Acts of the legislature for each of the three presidencies : Bengal, Bombay, and Madras. The Governor-General of India and the Governors of Bombay and Madras were the respective chancellors. The Punjab University was incorporated in 1882 and Allahabad in 1887. During 1971-72 there were 85 universities under section 3 of the University Grants Commission.

University Education (1854-1902) : The University Acts of 1857 established universities at Calcutta, Bombay and Madras. Indian Universities (Degrees) Act was passed in 1860 which empowered the universities to confer such diplomas or degree or licences as approved by the bye-laws or regulations. The Universities (Honorary Degrees) Act in 1884, empowered the three universities of Calcutta, Bombay and Madras to confer the Honorary Degree of LL.D. The Punjab and Allahabad Universities were established in 1882 and 1887 respectively. The report of Indian Education Commission did little to improve university education. Lord Curzon appointed the Indian Universities Commission (1902) to inquire into the condition and prospects of the universities established in British India and to consider proposals for their constitution and working.

The Commission adopted the model of the London University as modified by the Act of 1898. The Indian Universities Act, 1904 introduced many changes in the universities which in general were not liked by the Indians.

University and College Education (1902-1921). The Government Resolution on Educational Policy dated 21st February, 1913, declared that a university would be established for each province. The Calcutta University Commission or the Sadler Commission (1917-1919) made far-reaching recommendations not only with respect to Calcutta University but also with respect to university education in general. The number of universities increased from 5 in 1916 to 12 in 1921-22. Government grant to universities increased manifold. The number of students going in for arts and science courses of the Indian Universities increased by over 200 percent in twenty years between 1901-02 and 1921-22. However, this increase in number was almost purely literary in character and unhelpful for the industrial and commercial regeneration of the country.

University and Collegiate Education (1921-1937). As a result of the first All India Conference of Indian Universities held at Simla in 1924, the Inter-University Board came into being in 1925 for the co-ordination of the work of Indian Universities. The number of University Departments and constituent or affiliated colleges increased from 207 in 1921-22 to 446 in 1936-37 and the number of students from 66,258 to 1,26,228.

University and Collegiate Education (1937-1947). Several new colleges were opened, four new universities were established, and there was a substantial increase in the enrolment and activities of the universities and colleges during this period. The large expansion of university education was primarily due to the Second World War and a general awakening among the people due to Quit India Movement. The country did not get the maximum benefit from this rapid expansion of university education as the turn-over of trained personnel in scientific, technical, agricultural or professional fields was far from adequate to meet the needs of the country.

University and Collegiate Education (after 1947). The setting up of the University Education Commission under the chairmanship of Dr. S. Radhakrishnan in 1948 was the most important and the earliest decisions of the Government of India in the post-independence period. The report of the Commission submitted in 1949 has been considered to be an educational document of great significance which has been guiding the programmes of university education during the last twenty three years. In accordance with the recommendations of the Radhakrishnan Commission, a University Grants Commission was set up in 1953. The main responsibility of the

National Service Scheme (1969)

Background. One of the recommendations of the Education Commission (1964-66) was that students at all stages of education should be associated with some form of social service. This was taken into account by the State Education Ministers during their conference in April 1967, and they recommended that at the university stage, students could be permitted to join the National Cadet Corps which was already in existence on a voluntary basis and an alternative to this could be offered to them in the form of new programme called the National Service Scheme (NSS). Promising sportsmen, however, should be exempted from both and allowed to join another scheme called the National Sports Organisation (NSO), in view of the need to give priority to the development of sports and athletics. The conference of Vice-Chancellors in September 1967 welcomed this recommendation and suggested that a special committee of Vice-Chancellors could be set up to examine this question in detail.

The details were soon worked out and the Planning Commission sanctioned an outlay of Rs. 6·5 crore—Rs. 5 crore for the NSS, and Rs. 1·5 crore for the NSO during the Fourth Five-Year Plan. It was stipulated that the new NSS programme should be started as a pilot project in selected institutions and universities.

Launching of the Scheme. On September 24, 1969, the then Union Education Minister, Dr. V. K. R. V. Rao, launched the NSS programme in 37 universities covering all States and simultaneously requested the Chief Ministers of States for their cooperation and help. It was appropriate that the programme was started during the Gandhi Centenary Year as it was Gandhiji who inspired the Indian Youth to participate in the movement for India's independence and the social uplift to the down-trodden masses of our nation.

The scheme will be shared between the Centre and the States, Central Government spending Rs. 100 and the State Government,

Rs. 50 per student per year, an expenditure equivalent to one NCC cadet.

The Motto of National Service. The motto of the National Service Scheme is 'NOT ME BUT YOU'. This expresses the essence of democratic living and upholds the need to appreciate the other man's point of view first and to show consideration for fellow human beings. It also underlines that the welfare of an individual is ultimately dependent on the welfare of society as a whole. Therefore, it will be the aim of the NSS to demonstrate this motto in its day-to-day programme.

Objectives of the National Service Scheme. The overall objectives of the National Service Scheme is service to the community, offered while undergoing instruction in an educational institution. It is sought to arouse the social conscience of students and provide them with the opportunity to work with the people around the educational campuses creatively, and constructively and to put the education they receive to concrete social use.

Programme Planning and Development. There are three principal elements in the programming process ; the students, the teachers, and the programme content. Each of these elements, however, has many components. The students have their interests and their needs, their special abilities, their relationships with each other and with the teacher, their particular norms and values related to their family and community life. The teacher has his professional knowledge and skills, his special abilities, his role as the representative of the college and as the bearer of the values and norms of the college and of society as a whole. The programme content is designed to meet the needs and interests of the students and to maintain or change the norms and values of the group, the community and the society.

The inter action of these three elements is essential in programme planning if the National Service Scheme is to provide a meaningful experience for its members. The important consideration however, is that no one element is over, weighted at the expense of the others. The emphasis is on integration of the three elements so as to produce a balanced and satisfying result.

The programme covers four aspects :

1. *Institutional Work.* The students may be placed in selected welfare agencies outside the campus, to work as volunteers.
2. *Institutional Project.* Improvement of campuses, construction of play fields, swimming pools, etc.
3. *Rural Project.* Education of illiteracy, minor irrigation works, agricultural operations, health, hygiene, sanitation, development of rural cooperatives, savings, drives, construc-

tion of rural roads etc. (preferably by adopting villages within the easy reach of colleges).

4. *Urban Project.* Adult education, welfare of slum-dwellers, training in civil defence, setting up first-aid posts, hospital work, etc.

Conditions for Success of the Project

Towards successful attainment of their aims, the colleges should note :—

- (a) They should meet the genuine need of the community or the particular group which they are meant to serve and their value should be apparent to the community, as well as the workers.
- (b) As far as possible, the local community should be given an opportunity to participate in the planning and execution of the work.
- (c) They should provide ample opportunity for work by the unskilled participants also.
- (d) While the manual work should be realistic and strenuous, it should be operated within reasonable limits so as to allow adequate room for other aspects of the programme—educational and recreational. Unless the programme is well-balanced, it will not be able to sustain the interest of the youth who are to be drawn into the scheme.
- (e) The NSS teachers should be given adequate training, theoretical and practical, in the various functions which they will have to perform.

The NSS Bureau in Colleges

The National Service Scheme Bureau at the college level will serve as an agency where the students desirous of joining the National Service Scheme may secure information and guidance about available opportunities for community service suited to their talents and temperament. Secondly, the Bureau should also serve as a central pool of student manpower to which the welfare agencies in the town may turn to obtain the right volunteer for the right job. Lastly, it can serve as a link between the individual student volunteer and the field agency and also give pre-placement training to the student volunteer.

Financial Arrangements

During 1969-70, the NSS programme was initiated in 37 universities and three institutes involving 40,000 students. The target for 1970-71 was to cover 95,000 students in all universities. Under the scheme, the per capita cost has been estimated at Rs. 150

per student per year, the Central Share being Rs. 100 and State's Rs. 50.

Out of the Central Government's share of Rs. 100, Rs. 70 per student are given as grant-in-aid to States and Rs. 80 kept for central programmes. At the State level the quantum of grant available for development of NSS is Rs. 120 per student (Rs. 70 from the Centre and Rs. 50 from the States).

Education and Emotional Integration

Meaning of Emotional Integration. Emotional integration has been described "as a feeling among people to share certain common objectives, purposes or ideals and giving them high place over smaller or sectional loyalties. In other words it has been defined as a feeling of oneness which may transcend all groups or cultural differences and synthesise the different religions, castes, linguistic communities emotionally into a compact whole".

Pt. Jawaharlal Nehru wrote, "We should not become parochial, narrow-minded, provincial, communal, and caste-minded, because we have a great mission to perform. Let us, the citizens of the Republic of India, stand up straight, with straight backs and look up at the skies, keeping our feet firmly planted on the ground, and bring about this synthesis, this integration of the Indian people. Political integration has already taken place to some extent, but what I am after is something much deeper than that—an emotional intergration of the Indian people so that we might be welded into one, and made into one strong national unit maintaining at the same time all our wonderful diversity."

Why Emotional Integration. India is a land of so many faiths, creeds, castes, languages etc. It is very essential that people of different faiths, creeds etc., think in terms of nationalism and place the welfare of the country above such narrow considerations. In the words of the Emotional Integration Committee, "One of the hardest problems before us to-day is the building up a national mind by curbing the religious, linguistic and communal conflicts which tend to disunite us."

Education and Emotional Integration. Education can play an important role in strengthening the bonds which make us Indians first and last whatever our language, creed or political affiliations,

Dr. K. L. Shrimali observed at the Inaugural Meeting of the Emotional Integration Committee, "If we are convinced that in the present state of our development we must make a deliberate effort to develop national consciousness among our people, it is a legitimate demand that our educational system should be geared to fulfil this purpose. Educational policies and practices are determined largely by national needs and requirements and our greatest need today is the development of national consciousness among our youth. Schools must become the instruments for the realisation of national ideals. They must give to the youth a feeling of common interest and a sense of belonging to a worthy national community which had a great past and a present full of hopes and dreams merging into a glorious future. Education must make the growing youth realise that they are indissolubly bound to the nation and its destiny, its tragedies and joys, its conflicts and settlements, its failures and achievements, its mistakes and wisdom and they should come to regard it with pride and with love and the impelling desire to serve it whole-heartedly."

Emotional Integration Committee. The Ministry of Education of the Government of India appointed the committee on Emotional Integration under the chairmanship of Dr. Sampurnanand in May 1961. The terms of reference were as follows:—

(i) To study the role of education in considering and promoting the processes of emotional integration in national life and to examine the operation of tendencies which come in the way of their development.

(ii) In the light of such study, to advise on the positive educational programmes for youth in general and students in schools and colleges in particular, to strengthen in them the processes of emotional integration.

The Committee adopted four methods to study the problem (i) The questionnaire, (ii) Evidence, (iii) Tours, (iv) Text-book Questionnaire.

Role of Education. Regarding the role of education the Committee remarked, "Education can play a vital role in strengthening emotional integration. It is felt that education should not only aim at imparting knowledge but should develop all aspects of a student's personality. It should broaden the outlook, foster a feeling of oneness and nationalism and a spirit of sacrifice and tolerance so that narrow group interests are submerged in the larger interests of the country."

Suggestions in the Regard. The Committee gave the following suggestions:—

- 1. Re-orientation of the Curriculum.** It is felt that the school and college curriculum should be re-oriented to suit the needs of a secular state.

At the primary stage the importance of stories, poems, folklore, and teaching of social studies, national anthem and other national songs, has been emphasised. Daily morning prayer has also been recommended.

At the Secondary stage the curriculum should include among other things, the study of language and literature, social studies, moral and religious instruction and co-curricular activities.

At the University level the study of different social sciences, languages and literature, culture and art and also the exchange of teachers and students have been recommended.

2. Co-curricular Activities. The place of co-curricular activities in the curriculum is considered to be very important. These activities include common observance and celebration of festivals and events of national importance, sports, educational excursions, tours, and picnics, military training like the NCC, ACC, Scouts and Guides, Student Camps, debates, symposia, dramatics and youth festivals. The use of audio-visual aids like films, pictures, radio and T.V. has also been recommended.

It is felt that participation in co-curricular activities helps in the growth of a well-balanced and well-adjusted personality. It creates a group feeling of oneness and brotherhood, broadens the outlook and develops a catholicity of spirit and tolerance which are necessary for good citizenship.

3. Special Stress on the Teaching of Social Studies. The teaching of social studies has been recommended at all levels i.e., the primary, secondary and university stages. This would impart knowledge of the geographical, historical and cultural background of the country and of the world as a whole. Books on social studies should include reference to the lives and works of the great men of India and of the world and also stories from ancient books like the Ramayana and the Mahabharata.

4. Text-books. In order that the text-books play their legitimate role in strengthening of emotional integration, it is necessary that they be reoriented and improved. In the preparation of history text-books special care needs to be taken to see that facts are not misrepresented, distorted or exaggerated to create prejudice.

The get up as well the content of text-books requires a change.

At the primary level the text-book writers should make a liberal use of pictures and illustrations so as to create interest in the child at the very outset.

5. Language and Script. (i) The use of the Roman script may be permitted in certain areas for an interim period to enable persons to improve their acquaintance with Hindi.

(ii) Throughout India the international numerals must be used.

(iii) To reduce the burden of three scripts Hindi may be learnt in the non-Hindi areas in the regional script.

(iv) To popularise the study of Hindi in non-Hindi speaking areas a beginning may be made with the publication of Hindi books in the Roman Script and the compilation of simple dictionaries in Hindi—other languages, also in the Roman script.

(v) Hindi books may be published in the regional script and the compilation of Regional Language—Hindi dictionaries should be encouraged.

(vi) At the high school stage Hindi must be taught in the Devanagri script, keeping in view the constitutional provision.

(vii) The two link languages—Hindi and English should be effectively taught at university level so that conditions of emotional and intellectual isolation are not created.

(viii) It is necessary to ensure that in implementing any language policy the rights of minorities are adequately protected.

6. Uniform for School Children. It is desirable to have a uniform for school children ; one common uniform for the whole of India is not necessary ; schools may have their own preference in regard to colour and pattern.

7. Singing of National Anthem. Children should be taught to sing the National Anthem in unison and behave in a disciplined way when it is sung. They should also be taught the meaning of the verses.

8. Reverence for the National Flag. Students should be told the history of the National Flag and taught at the very earliest stage to show reverence to the National Flag.

9. Celebrations of National Days. National Days—January 26, August 15 and October 2—should be celebrated in schools with the full participation of the teachers, the students and the community.

10. Special Talks on the Unity and Oneness of the Country. Special meetings of the school assembly should be held from time to time and the speakers speak to the children on topics dealing with the unity and oneness of the country.

11. Taking Pledge. Students may be asked to repeat a pledge twice a year dedicating themselves to the service of their countrymen. A draft of such a pledge in English is given below :—

India is my country, all Indians are my brothers and sisters.

I love my country, and I am proud of its rich and varied heritage. I shall always strive to be worthy of it.

I shall give my parents, teachers and all elders respect and treat every one with courtesy. I shall be kind to animals.

To my country and my people, I pledge my devotion. In their well-being and prosperity alone lies my happiness.

12. Open-Air Dramas. Open-air dramas may be staged four times a year by every school. At least one play should be based upon a theme derived from the classics or from the history of ancient India. In predominant Hindu areas there should be some plays dealing with non-Hindu lives and vice versa.

13. Students Exchange and Tours. Such tours should be conducted from one State to another. The inter-state visits, if properly organised should do much to acquaint both teachers and children with different parts of the country.

A network of youth hostels should be set up by all the States in selected places.

14. School Improvement. Students should be associated with the cleanliness of the school premises. This would not only increase their pride in it, and loyalty to the school but would also help in improving the school for future students.

15. Admissions. Admissions to schools, colleges and other educational institutions should not be given on the basis of caste but on the basis of means and merits.

16. Recognition of Institutions. Recognition should not be given to institutions where divisive tendencies are encouraged.

17. Freeship and Scholarships. These should be awarded only on the basis of means and merit.

18. No Domiciliary Restrictions. Domiciliary restrictions in regard to migration of students between one State and other should be removed.

19. Suitable Handbooks for Teachers. Suitable handbooks for teachers in the social studies and languages should be published.

20. All India Award. An annual all-India award for the best general essay on different States in India should be instituted.

21. Educational and Travel Documentaries. Educational and travel documentaries with particular emphasis on various aspects of Indian scenery, flora and fauna, on various developmental and reconstruction programmes should be produced for use in schools and these should form a regular feature of the schools.

22. School Projects. Schools may conduct several projects which improve their general knowledge of the country. For instance, a 'know your country' project can be undertaken during which children may share in the collection of information about a State in the Indian Union other than their own.

23. Exchange of Professors. Distinguished professors should also be deputed periodically to different universities so that a large range of students can benefit from their experience.

24. All-India Youth Council. An All-India Youth Council should be set up to co-ordinate all the youth programmes taken up by the Central and State Governments and also to help these various agencies to extend their efforts.

25. Teachers. The Union Ministry of Education should implement a scheme providing for a national minimum scale of salaries for teachers in the primary, middle and secondary schools.

26. A Pay Revision Committee. A Pay Revision Committee, consisting of representative from the Planning Commission, the Ministries of Education and Finance and representatives from the teaching profession, should be immediately set up to work out the full financial implications and operative details of implementing the scheme for a national minimum scale of salaries for teachers with the help of subcommittee at State levels, if necessary. This work should be completed as expeditiously as possible.

Recent Educational Programmes for National Integration

1. Setting up of the National Integration Council.
2. Setting up of National Integration Samitis in Universities and Colleges for the purpose of promoting mutual understanding and appreciation among persons coming from different parts of India. At present there is a total number of 105 Samitis functioning in the country.
3. Formation of committees composed of members drawn from various fields of national life to act as spearheads for a mass movement in the cause of national integration.
4. Survey of text-books and elimination of biased and prejudiced material leading to hatred among different communities.
5. Establishing planning forms for disseminating information.
6. Organisation of writers' camps.
7. National Integration Inter-State Student-Teacher Camps.
8. Celebration of Centenaries,

Education For International understanding

Education, United Nations Charter and International Understanding

The signatories of the United Nations Charter have pledged "to live together in peace with one another as good neighbours, to take effective measures for the removal of areas of differences and to develop friendly relations among nations." It is understood that these ends cannot be achieved without education. This point is made explicit in the Universal Declaration of Human Rights in which it is declared—

"Education shall promote understanding, tolerance and friendship among all nations, racial or religious groups and shall further the activities of the United Nations in the maintenance of peace."

One of the Resolutions of UNESCO reads as :

"Member States of UNESCO in accepting its constitution have agreed that the purpose of the Organisation is to contribute to peace and security by promoting collaboration among the nations through education, science and culture in order to promote universal respect for justice, for the rule of law, for the human rights and fundamental freedoms."

Mr. Kirpal on the Objectives of International Understanding. Speaking at the National Seminar on International understanding held in December 1964, Mr. Kirpal made these observations :

"Firstly, the objective of international understanding is peacefully living together or peaceful coexistence. Peacefully living together, implying the removal of tensions is something not so positive ; it is rather negative. It implies that tensions exist ; they are to be removed, which must be done in peaceful co-existence.

The second phase of international understanding would be something more positive, more active. It is the building up of

understanding through knowledge and mutual appreciation. This is a question of going beyond the removal of tensions ; that of making friends really. The first stage is of uneasy acquaintanceship, the second stage is more positive—of friendship, of meeting together, of understanding and above all appreciating.

The third stage—and this is very important—is of creatively striving together. That brings me to the idea of the oneness of mankind, and the one overall objective that we must pursue is the objective of the oneness of mankind. This can be achieved through people's striving together, helping one another in a creative way for the oneness of mankind—whether they are engaged in the task of building a new education or in the many facets of development. In other words, we have to eliminate ignorance and prejudice, firstly through knowledge, based on a programme which provides information and knowledge to the pupils in the class-room, and to people outside the class-room ; secondly, by going beyond knowledge and promoting mutual appreciation and understanding through active participation, by creating sympathy and appreciation of cultures ; and lastly, by building up a faith in mankind and in a vision of its future—thus achieving consciousness of the oneness of mankind. This kind of education for international understanding lies at the heart of the educational process. It is not additional, it is not a burden and if we pursue it rightly, it is something which contributes to the quality of education. We are aiming to improve the quality of education in the Fourth Five Year-Plan. This can be done by education through international understanding for which we need a programme which is practical and feasible.

Three Levels of Promoting Education for International Understanding. Briefly, we have to act at three levels. The first level is in the school, elementary and secondary ; the second in the university and the third level in out of school programmes, in adult education, and in our country especially, in the pursuit of literacy, in the programmes for literacy, adult literacy and adult education.

Meaning of International Understanding. Dr. Walter H. C. Lewis, a former Deputy Director General of UNESCO in his address to the American Association of Teacher Education in Chicago in 1956 stated, "...International understanding is the ability to observe critically and objectively and appraise the conduct of men everywhere to each other, irrespective of the nationality or culture to which they may belong. To do this one must be able to detach oneself from one's own particular cultural and national prejudices — and to observe men of all nationalities, cultures and races on equally important varieties of human beings inhabiting this earth."

Kenworthy S. Leonard thinks that education for international understanding would "help children to understand the pride of all peoples for their own group and to develop respect for their feelings. Social scientists call this feeling 'empathy' and consider it among the important attributes to develop."

Qualities to be cultivated in Members of an Integrated World Community. E. B. Castle lists them as under :—

These qualities are but an extension of those that we expect to see in the good national citizens.

1. A concern for the welfare of others ;
2. Willingness to place the common good before one's own immediate interests ;
3. The will and courage to co-operate by good means for good ends ;
4. Receptivity to truth wherever and however it may be revealed ;
5. A capacity to think clearly, independently and without prejudice.
6. A capacity to form critical judgment ;
7. A quality of mind that is tolerant to honest opinion but intolerant of evil, selfishness and dishonesty in all their forms ;
8. Readiness to claim no rights for oneself that one is not willing to concede to others ;
9. A sense of personal responsibility for the right ordering of community life ;
10. Respect for persons of every class, race and colour ;
11. A quality of imagination that enables a man to assess the results of any action or policy on people far removed from this immediate surroundings.

Functions of Education for International Understanding and Co-operation

‘Education for International Understanding and Cooperation’ reads that education should—

- (1) Make it clear that unless steps are taken to educate mankind for the world community it will be impossible to create an international society conceived in the spirit of the Charter of the United Nations.
- (2) Make clear that States, whatever their difference of creeds and ways of life, have both a duty to co-operate international organisations and an interest in so doing.
- (3) Make clear that civilisation results from the contributions of many nations and that all nations depend very much on each other.
- (4) Make clear the underlying reasons which account for the varying ways of life of different peoples—both past and present—their traditions, their characteristics, their problems and the ways in which they have been resolved.

(5) Make clear that throughout the ages, moral, intellectual and technical progress has gradually grown to constitute a common heritage for all mankind. Although the world is still divided by conflicting political interests and tensions, the inter-dependence of peoples become daily more evident on every side. A world international organisation is necessary and it is now also possible.

(6) Make clear that the engagements freely entered with by the Member States of international organisations have force only in so far as they are actually and effectively supported by these peoples.

(7) Arouse in the minds, particularly of young people a sense of responsibility to this community and to peace.

(8) Encourage the development of healthy social attitudes in children so as to lay the foundations of improved international understanding and co-operation.

The Concept. The scourge of war 'which twice in our lifetime has brought untold sorrow to mankind' is a grim reminder to, what H. G. Wells once described as 'a race between Education and Catastrophe', and throws a stern warning that we shall once again find ourselves painfully ill-equipped to meet the challenge of an adult world of tomorrow, unless we are determined to lay its foundations in the schools of today. The key to the salvation of mankind thus, lies in the reorientation of the minds of the people, or, to speak in the language of the UNESCO preamble, 'in constructing the defences of peace in the minds of men'. And can there be any better base for raising the structure of lasting peace than the impressionable years of our young boys and girls in schools ?

OBSTRUCTIONS IN THE WAY OF INTERNATIONAL UNDERSTANDING

1. **Physical Barriers.** People of different countries live in isolation.

2. **Political Barriers.** Narrow nationalism affects understanding between nations and nations.

3. **Economic Barriers.** There are restrictions on international trade, foreign exchange and currency.

4. **Religious Barriers.** Religious barriers lead to prejudices.

5. **Linguistic Barriers.** Differences of language do not allow people of different linguistic groups to come closer.

6. **Psychological Barriers.** Frustration and fear born of ignorance, selfishness and hostility lead to aggression and war.

7. **Educational Barriers.** Teaching of social studies lead to narrow nationalism and narrow loyalties.

Implications of a Programme for International Understanding.
Our school programmes for international understanding should enable an individual :—

1. To know and understand how peoples of other lands live.
2. To recognise the common humanity which underlines all differences in culture.
3. To work for a fair and just world.
4. To maintain interest in world affairs.
5. To recognise the importance of solving world problems according to democratic practices.
6. To appreciate the contribution of all peoples to the world citizenship.
7. To combine love of one's country with a broad social consciousness towards the problems of the world.
8. To understand the economic, cultural and the like factors which make the world an inter-dependent community of nations.
9. To respect the dignity and worth of man by giving him equality of rights and opportunities.
10. To take world as one unit.
11. To realise that truth also triumphs and leads to human progress and prosperity.
12. To believe in common values and goals for the world community.
13. To understand that victories of peace are greater than victories of war.

Why Education for International Understanding?

I. Wrong Emphasis on 'My Country, Right or Wrong'. The Secondary Education Commission Report observes, "There is no more dangerous maxims in the world of today than 'My country, right or wrong'. The whole world is now so intimately interrelated that no nation can or dare live alone and the development of a sense of world citizenship has become just as important as that of a national citizenship. In a very real sense, therefore, patriotism is not enough, and it must be supplemented by a lively realisation of the fact that we are all members of one world and must be prepared mentally and emotionally, to discharge the responsibilities which such membership implies." Nationalism should not degenerate into nationalistic jingoism.

II. Adjustment of Human Consciousness. Dr. Radhakrishnan states, "We need today an adjustment of the human consciousness of the nuclear age in which we live. It is now conceivable that the human race may put an end to itself by nuclear warfare or preparations for it. This, if it happens, will be the result of the failure of man's consciousness to adjust itself to the technological revolution."

III. Progress in Art and Literature. K. G. Saiyidain writes, "There can neither be health, nor economic prosperity, nor the leisu-

red pursuit of art and literature and culture in a world, that is either plunged in or over-shadowed by war."

IV. More Interdependence and Intimate Relationship in the World of Today. Modern scientific means of rapid communications—the radio, the television and the telephone—have conquered both space and time. K. G. Saiyidain rightly remarked : "A war starts in Europe and three million people die of famine in Bengal and millions more find themselves up-rooted from their homeland, cut off from their national occupation and deprived off all that makes life pleasant, gracious and meaningful."

In the words of P. E. James, "An industrial society by its essential nature, is global in its scope and international in its needs. If it is to survive it must draw upon all the world's resources and all the world's people must share its benefits. Our way of living is dependent on the co-ordinated economic activities of distant people. This is the concept of *one world*—of one community of interdependent peoples."

V. Democratic Ideals. 'One world' 'One State' has taken the place of the slogan 'my country, right or wrong'. People have begun to realise that all men are equal and all the nations should strive for the betterment of the humanity so that all individuals get adequate opportunities to grow and develop.

VI. Longing for World Prosperity. The Vedic hymns speak of a world in which all people had a prosperous and happy life. India true to her ancient traditions, rightly works for international understanding.

The Panchatantra states, "It is the thought of little-minded persons to inquire whether a man is one of ourselves or an alien."

Ways and Means of Creating World Understanding. Teaching for world understanding should pervade the whole educational programme—the attitudes of the members of the staff, curricular and co-curricular activities and experiences of the school. We have to fashion and plan our teaching and learning process in a way that the children can grow with world-mindedness.

I. Curriculum

Curriculum should enable our students—

(i) to learn that the earth is the home of man and other living things ;

(ii) to learn the similarities and differences of the people of the world ;

(iii) to learn the many ways of living on this planet and some of the reasons for the wide variety of modes of life ;

(iv) to learn that world is a place of fun and beauty ;

(v) to learn how to promote better understanding of the inter-dependence of the peoples of the world ;

(vi) to learn about the division of the world into nations and culture and to make better adjustments ;

(vii) to acquire an elementary knowledge of the major religions and the beliefs in the world today and to learn to respect persons whose views differ from their own.

(viii) to know something about the long struggle of mankind to replace conflict with co-operation ;

(ix) to develop a desire and the simple skills to participate effectively in building a better world.

A UNESCO publication states "Extracts from the work of writers such as Dickens, Gorky, Tolstoy, Tagore and Ibsen can be used to illustrate stages in social progress, in the emancipation of women, in religious freedom, and in the struggle for human rights in other domains."

New Interpretation of History. K. G. Saiyidain has said very lucidly that we should reorient our history teaching towards a higher and nobler objective and should bring through it re-education of people's ideas and emotions. The following points may be observed while teaching history :—

(i) History of the countries should be taught objectively.

(ii) History should be taught with a cultural bias.

(iii) The impact of technological and scientific techniques on the lives of the different countries of the world should be stressed in the teaching of history.

(iv) The interdependence of the different countries of the world should be explained in concrete terms.

(v) Selected stories from great personalities of the world like Gandhiji, Christ, Mohammed, Buddha, Alfred, etc., should be included.

(vi) Nothing should figure in the text-book of history which may tend to spoil international harmony.

(vii) Students may be encouraged to read newspapers and magazines to increase their knowledge about the contemporary events.

(viii) Students should be told more and more about international agencies like the UNO and the UNESCO.

Geography. This enables an individual to have a vivid concept of the globe, where he can see all in parts in terms of the whole and where he can see his own country in inter-relationships. The students learn concretely how they depend upon others for the enrichment and happiness of their life. They come to know how geographical

situations have affected the environment and course of history of different countries of the world. They are given a sense of space and location as affecting human actions.

Civics. A survey of certain countries' government, economics, technology, family system, etc., would develop in children "an acceptance of differences and an appreciation of the reasons for cultural diversity". The students come to know that the modern civilisation is the result of the cumulative and cooperative effort of many people rather than the product of the genius of one people.

Science and Its Social Implications. Students should be told how scientific discoveries could be made use of for the betterment of human civilisation and how natural resources could be taught for the betterment of the world as a whole. We should stress that the great scientists like Copernicus, Galileo, Newton, Jagdish Chandra Bose etc.. belong to all nations and that they did not work for any particular country.

Philosophy. Philosophers throughout the history of the world have been stressing mental peace as the human goal. This fact may be brought home to the students.

Psychology. This also brings forth the fact that human behaviour everywhere is guided by similar innate tendencies.

Music. In learning the words and tunes of songs from other countries quite young children begin to have a sense of the variety or differences in traditional songs and folk music.

Drawing, Painting, Modelling, Handicrafts. These subjects represent unity of human feeling and thought.

It has been observed in a pamphlet on 'Education for International Understanding' that "a planned programme involving several subjects probably has the most impact and is likely to have the greatest effect in orienting the whole life of a school towards a world outlook."

Primary Education as the Foundation of International Understanding. "The foundation of international understanding can be laid in the primary school. Indeed, it is especially important that effective work be done at this level, first because during these years children form fundamental attitudes which they carry with them into later stages of education and even into adult life, and second because most of the world's school children do not continue beyond primary stage."

"Most educators agree that one of the main tasks of the primary school should be to help children form healthy, well-balanced personalities. If they acquire respect for the rights of their fellows, a constructive approach to differences, a willingness to co-operate, and a sense of individual responsibility, they will be all the better prepar-

ed for the concepts of international understanding. Thus, the spirit of the school and the nature of the teacher-pupil relationship may be of most importance than the subject-matter taught."

"But direct teaching for international understanding is also possible. Many teachers believe that it should be undertaken with children from the age of 7 or 8 onwards. They can begin, for example, to learn something about other countries and their customs and about activities of the United Nations and its related agencies. It is important, however, not to confront children with information or abstract ideas beyond their grasp."

Social Studies. (a) Stories of lives of great men and their main contribution to the world ; e.g., those who have been fighters for freedom ; who have moulded the destinies of a nation ; great philosophers and saints and an effort should be made to emphasise their universal outlook, and love for humanity. In this could be included lives of Rama, Krishna, Buddha, Jesus, Mohammed, Kabir, Vivekananda, Dayanand, etc., as saints and religious reformers ; Mahatma Gandhi, Nehru, Kennedy, Tolstoy, George Washington, Sun Yat Sen, Lenin as fighters for freedom.

(b) Lives of great scientists and mathematicians, e.g., Archimedes, Hevaclitus, Euclid, Pythagoras, Raman, Faraday, Addison, etc., may be taken up in simple story form and what they have contributed to mankind.

(c) Adventures and explorers like Marcopolo, Scott, Magellan, Columbus, Vasco de Gama, etc.

General Science. This could include topics on our daily necessities like food, water, air, weather. Common diseases of mankind may be included and through which reference could be made to what FAO, UNICEF, CARE, WHO and IMF are doing for us.

Mathematics. The story of numbers ; the history of lines ; the story of Arab, Indian, Greek and Egyptian mathematicians may be told and simple projects may be devised.

Language. Books on language could also include the lives of great personalities of the world who have not been touched upon in social studies.

Middle Stage. (a) It would be worthwhile if Social Studies is taught as an intergrated subject. Different units may deal with topics on "Our Rights and Duties as Citizens" of free India (for class VI) and later of the world in class VIII or IX. The study and teaching of Human Rights would be possible in this context.

(b) **Reading Newspapers and Books.** This could very well be a topic for class VI and include the work done by UNESCO toward paper and print.

At this stage, it will also be possible to make a comparative study of the religions of the world. In class VIII their common

doctrines and tenets could be emphasised, e.g., the Ramayana, Gita, Bible, Quran and Guru Granth Sahib along with Zoroastrianism and their Zend-Avesta and thus great personalities like Mahavir, Buddha, Shankaracharya, Nanak, Kabir, Ramananda, and Chaitanya, Vivekananda, Swami Ram Tirath of India and in the same way other countries could be introduced. Their unifying influence on society and in the removal of racial and other prejudices may be emphasised and a reference could be made to the aim of creating universal love for mankind—the cherished objective of the UNO.

Higher Secondary Stage. International understanding could be promoted through History and Geography too, but Civics and Economics provided an easier ground for pointedly teaching about the United Nations and its various agencies.

Topics like nationalism and internationalism invariably form part of the Civics syllabus as well as the UNO, the former League of Nations and so on.

Through a study of science, mathematics, languages and arts, a fairly comprehensive study of the people and their work may be made by the children of the higher secondary classes.

In Science, they can have topics on mechanism ; transfusion of energy ; rockets ; space-craft ; evolution of earth ; story of man and life on earth, through which the work of various organisations can be taught.

In an Arts class children can be asked to learn the dress, costumes and ornaments of people of other countries and make pictures of various facets of their life and exhibit them in the school.

It is through literature and language too that lives of great poets, musicians, singers, scientists and other great leaders could be taught with a comparative study of their philosophy and work. Persons like Dante, Kipling, George Washington, Abraham Lincoln, Gandhi, Nehru, Lenin, Karl Marx, Romain Rolland, Shakespeare and such men could be taken up.

Other Activities

Following activities are suggested :

- (a) Reading materials based on :—
 - (i) folk tales of different parts of India and of other countries ;
 - (ii) stories of children of other lands ;
 - (iii) fairy tales ;
 - (iv) simple stories based on epics and mythologies of the other countries ;

- (v) telling about famous men and women of India and of other countries, often in connection with anniversaries ;
- (b) Dramatising stories from other lands like "The Story of Little Red Robi Hood" ;
- (c) Singing and performing action songs and dances from other lands ;
- (d) Collecting pictures, handicrafts, household objects, dresses, etc.; of other lands ;
- (e) Organising exchanges at the school level of albums, toys, pictures, recorded music, children's book, children's paintings and drawings ;
- (f) Field trips to museums, ports, markets, exhibitions and other educational institutions, wherever possible ;
- (g) Establishing contacts between schools of different communities and nationalities located in the surrounding area. It might also be desirable for the city schools to develop contacts with sister-schools in the surrounding rural area. These contacts offer possibilities of promoting mutual understanding ;
- (h) Mutual exchange of children's games between schools of different regions.

Wherever curriculum does not lend itself to the study of other cultures, it may be taken up as co-curricular work.

In such a project, the environment of the country, its historical background, lives of the people, social and religious organisations, lives of children, their hobbies, sports and games may be highlighted. Many similarities and differences between the country under study and India will come to the fore. Children should be led to appreciate the differences and the basic similarities of life, values and aspirations. In the planning of the projects, children's interests and their development needs should be given due consideration.

The activities suggested below may be utilised according to the scope of the project and the situation of the school :—

- (1) Drama and skits ;
- (2) Class magazines, wall magazines ;
- (3) School newspapers, bulletins, news-boards ;
- (4) Celebration of anniversaries of great men, national and international days ;
- (5) Daily newstalks highlighting the important events of the day :
- (6) Invitation of resource persons, parents, persons of other nationalities or those who have stayed abroad for enriching the student's experience ;

(7) Collecting and displaying materials related to the country under study through exhibitions and at prominent places in the school :

(8) Preparing albums, scrap-books, dresses, models, toys, etc.

II. Exchange Programmes between the Participating Institutions within India as well as Those of Other Countries

Exchange of different kinds of materials between schools inside the country and other countries could be profitably undertaken as an aid to promote international understanding. Such an exchange would include—

(1) Exchange of outlines of different projects regarding the study of countries.

(2) Exchange of materials about India with a foreign country which wants to study India and similar material regarding other countries in return.

(3) Helping students of one group to develop correspondence with children of the same age group in the country taken up for study. The correspondence could help children in collecting information about the varied aspects of the life of the people, description of daily life at home, in school, entertainments, games, food habits, dresses, occupations and products. Such correspondence may also result in exchange of posters, slides, tape records, filmstrips, picture books, pictures of places of interest, art pictures, coins, toys, crafts, information about hobbies, songs, dramas, films and games.

(4) Teaching and exhibition materials could also be exchanged. This would include :

(i) Text-books, reference materials, children's magazine (manuscript and printed), scrap books, albums, newspapers, tape records, folk songs, dramatic scripts, etc.

(ii) Pictures and books of great men of science, arts, political life and leaders.

(iii) Children's books, folk tales, explorers, adventurers, prophets, etc.

(iv) National songs, festivals and procedures for celebrating.

III. Exchange of Teachers

1. The Indian National Commission and the Ministry of Education should expand the programme of awarding fellowships to Indian teachers to enable them to study and work in schools in other countries.

2. Possibilities of school-to-school contacts for exchange of teachers in different parts of the country and between different

teachers and between India and other countries should be explored. The Indian National Commission could help by preparing a list of such institutions which are interested in this type of programme.

3. The help of voluntary organisations like New Education Fellowship, Rotary Club, Lions Club, Experiment in International Living, World Confederation of Organisations of Teaching Profession, Indian Council for Cultural Relations, etc., could be sought with advantage in this connection.

IV. Exchange of Students

1. There are great possibilities of promoting national understanding if educational authorities arrange short duration camps during holidays in which students from one region may live, study and work with students of another region.

2. For the purpose of international exchange of students, the Scout Jamborees, the International Voluntary Work Camp Movement and such other projects may be exploited with advantage.

V. Role of Science Clubs in Promoting International Understanding

1. Science clubs which aim at giving a practical shape to science teaching in our secondary schools, can serve as very important and effective programmes for promoting international understanding provided they are planned and organised with a special bias towards this objective through certain science themes which have a bearing on international understanding.

2. While working out science club projects on international understanding, the major objective should be to develop in the pupil certain attitudes and abilities which result in a scientific way of thinking and solving problems in relation to human values and welfare. Therefore, besides imparting information and stimulating interest in the subject matter, content of the curriculum, the following specific objectives should be kept in view :

(a) To emphasise the fact that development of science has been a co-operative effort of scientists all over the world.

(b) To enable the pupils to realise that the results of science have always been for the use of mankind as a whole.

(c) To stress upon the need to use these results of science for the benefit of mankind and not for its destruction.

(d) Development of critical and rational thinking.

VI. The use of Postage Stamps for Education in International Understanding

The postage stamps can play a very vital role and provide many possibilities of enriching the curricular work and co-curricular activities in the school particularly where a project on another country is being planned. The teachers can utilise the stamps to the maximum advantage of fulfilling the objectives of the project.

on understanding the country. In the study of great personalities of a country, the series of stamps on those personalities is a very handy tool to be used. Almost every country has brought out stamps on their poets, saints, scientists, great statesmen, pioneers, humanitarians, besides the flora, fauna and the beautiful landscape.

VII. How Teachers Can Contribute to International Understanding ?

Teachers can develop attitudes favourable to international understanding among their students. Regarding the role of the teacher, C. F. Strong has observed, "He and the curriculum represent two vital formative factors for translating the aims and ideas of education into practice."

1. Teachers' Role Outside the School. Outside the school, teachers can play their part as intelligent and educated adults. "It is for teachers, as people above average in training and in conscientiousness to find time for grown-ups as well as children, and to give all possible support to those organisations which are concerned with informing the mind and stirring the social conscience of the adult community."

2. Teachers' Role in Teaching Social Study. Teachers can and must do better work in this field. They can and must teach students to use their eyes and their ears with sufficient intelligence to distinguish fact from propaganda and to substitute comprehension for prejudice. They must develop a proper regard for the use of reason rather than force. This point has been stressed by Mr. Saiyidain in these words, "a first condition for the functioning of an educated and peaceful democracy is that people should be trained to think for themselves and that they should regard loyalty to truth as more important than any other loyalty in life, whether to one's nation or race or country or community or anything else."

3. Teachers' Role in Understanding the Child. A UNESCO publication reads as follows : "We hold that in a very real sense : 'wars begin in the minds of men,' ; that war is a mental disorder strictly analogous with the psychological disease it sometimes causes. Therefore, we regard it as a matter of first importance for social and international living that educators should be more concerned with the child, and the healthy development of his body and mind, than with the contents of the various subjects which go to make a school curriculum."

4. Research in International Concepts and Attitudes. Investigations may be made by the teachers in finding out methods whereby improved concepts and attitudes in the field of international understanding may be developed. At an early stage in the course, the staff should try to learn the attitudes of the students towards other races and cultures in order to determine for each student the extent of training in international understanding which may be needed."

5. Visits to Other Lands. Staff members should be encouraged, by leave of absence, financial aid, and by other means, to study and travel in other countries, and that exchange of staff members be arranged as frequently as possible.

6. Faith and Enthusiasm for the Value of International Understanding. Teachers should have faith and enthusiasm for the value of international understanding and co-operation and should possess the equipment to infuse this spirit in the minds of their students.

7. Interpretation of the Value of International Understanding of the Curriculum. While teaching various subjects the teachers should concentrate in helping students build up proper behaviour pattern and psychological dispositions impressing upon their minds that barriers of race, colours and distance do not stand in the way of uniting peoples of different countries.

8. Objective and Impartial in Their Treatment. They should avoid indoctrinating the minds of the pupils. They should be impartial and highly objective in interpreting or describing facts. They should not be propagandists.

They should impress upon the students that 'man' remains 'man' first and then he can be called a Jew, an Englishman, a German, Russian, Indian and American.

They should impress upon the students that "there is no special merit or value in being born in one part or the other."

9. Well Informed About World Situations. They should be well informed about the contemporary world science and its historical background, and concerned about improving the conditions of people everywhere and try to make students well informed.

10. Organisation of Activities in the School. They should organise the following types of activities in the school for developing an international outlook in the students :—

(i) Organisation of UN Societies and international clubs.

(ii) Celebration of social days for heroes of peace and great men of all nations.

(iii) Displaying of dramas showing the horrors of war.

(iv) Encouraging students to collect stamps and develop pen-friendships between children of different countries.

(v) Organisation of debates, lectures and discussions on the working of the UNO.

We may close the topic with a quotation from Leonard S. Kenworthy that a world-minded teacher is "an integrated individual, skilled in the art and science of human relations, and conscious of the wide variety of behaviour patterns in the world to which he may have to adjust—an intelligent participant in efforts to improve his own community and nation, mindful of their relationships

to the world community, clear in his mind about the goals of education for international understanding.

UNESCO and Its Constitution

UNESCO is one of the specialised agencies of the United Nations. Its operation and structure are determined by its Constitution which was drawn up by the members of the London Conference in 1945. This embodies the beliefs and hopes for the world of the Member States of the Organisation. Member States have accepted, among other principles, that "a peace based exclusively upon the political and economic arrangements of governments would not be a peace which could secure the unanimous, lasting and sincere support of the peoples of the world, and that the peace must therefore be founded, if it is not to fail, upon the intellectual and moral solidarity of mankind." The Constitution declares that "the wide diffusion of culture, and the education of humanity for justice and liberty and peace are indispensable to the dignity of man and constitute a sacred duty which all nations must fulfil in a spirit of mutual assistance and concern." It states that "ignorance of each other's ways and lives has been a common cause, throughout the history of mankind, of that suspicion and mistrust between the peoples of the world through which their differences have all too often broken into war." These are some of the ideas expressed in the document which determine the nature and purpose of the work of UNESCO.

The Aims of UNESCO. Article 1 of UNESCO's Constitution states : "The purpose of the Organisation is to contribute to peace and security by promoting collaboration among the nations through education, science and culture in order to further universal respect for justice, for the rule of law and for human rights and fundamental freedoms which are affirmed for the peoples of the world, without distinction of race, sex, language or religion, by the Character of the United Nations." To achieve this broad aim, three main fields of work are prescribed. The first is to "collaborate in the work of advancing the mutual knowledge and understanding of peoples through all means of mass communication" and to work towards the promotion of "the free flow of ideas by word and image". The second is to "give fresh impulse to popular education and to the spread of culture". Finally, UNESCO is to "maintain, increase and diffuse knowledge" by various means, including the conservation of the world inheritance of learning and culture and the encouragement of co-operation between countries in all branches of intellectual activity. These objectives are confirmed in the Universal Declaration of Human Rights, adopted by the General Assembly in 1948. Article 26 of the Declaration proclaims that "everyone has the right to education" and that "education shall be directed towards the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms". Article 27 continues by declaring that "Everyone has the right freely to

participate in the cultural life of the community, to enjoy the arts. and to share in scientific advancement and its benefits."

National Commissions. The importance of the individual in the kind of the work undertaken by UNESCO was recognised in the Constitution. To make participation by the individual and by private bodies more direct, the constitution provides for the formation of national co-operating bodies, or National Commissions, to integrate individual work in Member States with the work of the organisation. Most Member States have set up such commissions. They are broadly representative of their respective governments and of the principal national bodies interested in work of an educational, scientific or cultural nature. These commissions function as liaison agencies and sources of information in their own countries.

Programme of UNESCO

1. It will try to *rehabilitate* the devastated countries culturally.
2. It will strive for *world peace* by taking the following steps :—
 - (i) *International exchange of teachers* and students in order to remove racial prejudices.
 - (ii) The organisation of *international camps* where students of different nations will meet each other and exchange their views.
 - (iii) Organising *tours of foreign countries* so as to bring about mutual understanding and goodwill.
 - (iv) Organisation of *study circles* with a view to studying the needs of other nations.
 - (v) Writing of *history books* with an international outlook.
 - (vi) Establishment of an *international university* so as to discuss common problems of all the nations.
 - (vii) Establishment of *International Civil Service* in due course that its employees may render service to the entire universe.
 - (viii) Reorganisation of the press, the radio and the cinema for international welfare.
 - (ix) The *reduction of illiteracy* especially in backward countries.
 - (x) *Translating literary classics and significant contemporary works.*
 - (xi) Organising *art exhibitions.*
 - (xii) Expansion of *libraries and museums.*
 - (xiii) Fostering international understanding through the improvement of curricula and experimental activities in teacher training institutions.

The UNESCO has been doing a useful work for providing a proper environment for the success of UNO. Dr. Radhakrishnan has rightly stated. "There is nothing national with regard to education. The different countries are provinces of a common republic of culture. There is no such thing as Proletarian Mathematics or Nazi Chemistry or Jewish Physics. Culture is international and science is cosmopolitan in its essence and reality."

Indian National Commission for Cooperation with UNESCO

Genesis. An interim Indian National Commission for Co-operation with Unesco was set up in 1949 by the Government of India, Ministry of Education. The Interim Commission was placed on permanent footing in 1951 in order to ensure a better implementation of Unesco's programme in the country.

The Constitution of the Indian National Commission was revised in 1969.

Activities of the Commission

1. Dissemination of information about Unesco and other countries.
2. Celebration of UN Day, Human Rights, Day and International Literacy Year, Centenaries, Book Years, etc.
3. Exchange of Persons.
4. Liaison with States and Universities.
5. Relations with other National Commissions.
6. Publications.
7. Associated School Projects.
8. Unesco International Coupen scheme for assisting import of books.
9. Assisting Indian experts to find Unesco jobs.
10. Unesco Clubs.

Unesco Associated School Projects. There are now over 800 schools and teacher training colleges in 61 countries participating in this programme. In 1953 when India joined the programme it started with six institutions which later increased to 22. These schools worked on three main themes : (a) Teaching about the United Nations and its Specialised Agencies, (b) Teaching about the Human Rights and Fundamental Freedom, and (c) Teaching about Other Countries.

Unesco Clubs. The Indian National Commission for Unesco has been encouraging the establishment of Unesco Clubs/Centres in different Universities, Public Libraries and other Educational/

Cultural Organisations in India to function as the main clearing house to disseminate information about the purpose and programmes of Unesco, enlist the support of individuals or groups interested in the fields of Education, Science, Culture and Mass Communication and to promote and popularise the work of Unesco.

At present we have about 102 Unesco Clubs Centres which are functioning at different places in India. Sponsoring and setting up of Unesco Clubs/Centres is a significant trend in the efforts of the Indian National Commission for Unesco to obtain the support of maximum number of agencies for the Programme of Unesco.

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National Policy on Education

Background. Towards the end of the Third Five-Year Plan, a need was felt to hold a comprehensive review of the educational system of the country with a view to initiating a fresh and more determined effort at educational reconstruction ; and the Education Commission (1964-66) was appointed to advise Government on the National pattern of education and on the general principles and policies for the development of education at all stages and in all aspects. The Report of the Education Commission was widely discussed and commented upon. A general consensus on the national policy on education emerged in the course of these discussions. Accordingly the Resolution of National policy on Education was presented in the Parliament on July 24, 1968.

National Policy on Education

1. Education has been always accorded an honoured place in Indian society. The great leaders of the Indian freedom movement realised the fundamental role of education and throughout the nation's struggle for independence, stressed its unique significance for national development. Gandhiji formulated the scheme of basic education seeking to harmonise intellectual and manual work. This was a great step forward in making education directly relevant to the life of the people. Many other national leaders likewise made important contributions to national education before independence.

2. In the post-independence period, a major concern of the Government of India and of the States has been to give increasing attention to education as a factor vital to national progress and security. Problems of educational reconstruction were reviewed by several commissions and committees, notably the University Education Commission (1948-49) and the Secondary Education Commission (1952-53). Some steps to implement the recommendations of these Commissions were taken ; and with the passing of the Resolution on Scientific Policy under the leadership of Jawaharlal Nehru, the develop-

ment of science, technology and scientific research received special emphasis. Towards the end of the Third Five-Year Plan, a need was felt to hold a comprehensive review of the educational system with a view to initiating a fresh and more determined effort at educational reconstruction; and the Education Commission (1964-66) was appointed to advise Government on "the national pattern of education and on the general principles and policies for the development of education at all stages and in all aspects". The Report of the Education Commission has since been widely discussed and commented upon. Government is happy to note that a general consensus on the national policy on education has emerged in the course of these discussions.

3. The Government of India is convinced that a radical reconstruction of education on the broad lines recommended by the Education Commission is essential for economic and cultural development of the country, for national integration and for realising the ideal of a socialistic pattern of society. This will involve a transformation of the system to relate it more closely to the life of the people ; a continuous effort to expand educational opportunity ; a sustained and intensive effort to raise the quality of education at all stages ; an emphasis on the development of science and technology ; and the cultivation of moral and social values. The educational system must produce young men and women of character and ability committed to national service and development. Only then will education be able to play its vital role in promoting national progress, creating a sense of common citizenship and culture, and strengthening national integration. This is necessary if the country is to attain its rightful place in the comity of nations in conformity with its great cultural heritage and unique potentialities.

The Government of India accordingly resolves to promote the development of education in the country in accordance with the following principles :

(1) Free and Compulsory Education. Strenuous efforts should be made for the early fulfilment of the Directive Principle under Article 45 of the Constitution seeking to provide free and compulsory education for all children up to the age of 14. Suitable programmes should be developed to reduce the prevailing wastage and stagnation in schools and to ensure that every child who is enrolled in school successfully completes the prescribed course.

(2) Status, Emoluments and Education of Teachers : (a) Of all the factors which determine the quality of education and its contribution to national development, the teacher is undoubtedly the most important. It is on his personal qualities and character, his educational qualifications and professional competence that the success of all educational endeavour must ultimately depend. Teachers must, therefore, be accorded an honoured place in society. Their emoluments and other service conditions should be adequate and satisfactory having regard to their qualifications and responsibilities.

(b) The academic freedom of teachers to pursue and publish independent studies and researches and to speak and write about significant national and international issues should be protected.

(c) Teacher education, particularly in-service education, should receive due emphasis.

(3) **Development of Languages.** (a) *Regional Languages.* The energetic development of Indian languages and literature is a *sine qua non* for educational and cultural development. Unless this is done, the creative energies of the people will not be released, standards of education will not improve, knowledge will not spread to the people, and the gulf between the intelligentsia and the masses will remain, if not widen further. The regional languages are already in use as media of education at the primary and secondary stages. Urgent steps should now be taken to adopt them as media of education at the university stage.

(b) *Three-Language Formula.* At the secondary stage, the State Governments should adopt, and vigorously implement, the three-language formula which includes the study of a modern Indian language, preferably one of the southern languages, apart from Hindi and English in the Hindi-speaking States, and of Hindi along with the regional language and English in the non-Hindi-speaking States. Suitable courses in Hindi and/or English should also be available in universities and colleges with a view to improving the proficiency of students in these languages up to the prescribed university standards.

(c) *Hindi.* Every effort should be made to promote the development of Hindi. In developing Hindi as the link language, due care should be taken to ensure that it will serve as provided for in Article 351 of the Constitution, as a medium of expression for all elements of the composite culture of India. The establishment, in non-Hindi States, of colleges and other institutions of higher education which use Hindi as the medium of education should be encouraged.

(d) *Sanskrit.* Considering the special importance of Sanskrit to the growth and development of Indian languages and its unique contribution to the cultural unity of the country, facilities for its teaching at the school and university stages should be offered on a more liberal scale. Development of new methods of teaching the language should be encouraged, and the possibility explored of including the study of Sanskrit in those courses (such as modern Indian languages, ancient Indian history, Indology and Indian philosophy) at the first and second degree stages, where such knowledge is useful.

(e) *International Languages.* Special emphasis needs to be laid on the study of English and other international languages. World knowledge is growing at a tremendous pace, especially in science and technology. India must not only keep up this growth but should also make her own significant contribution to it. For this purpose, study of English deserves to be specially strengthened.

(4) Equalisation of Educational Opportunity. Strenuous efforts should be made to equalise educational opportunity.

(a) Regional imbalances in the provision of educational facilities should be corrected and good educational facilities should be provided in rural and other backward areas.

(b) To promote social cohesion and national integration the Common School System as recommended by the Education Commission should be adopted. Efforts should be made to improve the standard of education in general schools. All special schools like Public Schools should be required to admit students on the basis of merit and also to provide a prescribed proportion of free studentships to prevent segregation of social classes. This will not, however, affect the rights of minorities under Article 30 of the Constitution.

(c) The education of girls should receive emphasis, not only on grounds of social justice, but also because it accelerates social transformation.

(d) More intensive efforts are needed to develop education among the backward classes and especially among the tribal people.

(e) Educational facilities for the physically and mentally handicapped children should be expanded and attempts should be made to develop integrated programmes enabling the handicapped children to study in regular schools.

(5) Identification of Talent: For the cultivation of excellence, it is necessary that talent in diverse fields should be identified at as early an age as possible, and every stimulus and opportunity given for its full development.

(6) Work Experience and National Service. The school and the community should be brought closer through suitable programmes of mutual service and support. Work experience and national service including participation in meaningful and challenging programmes of community service and national reconstruction should accordingly become an integral part of education. Emphasis in these programmes should be on self-help, character formation and on developing a sense of social commitment.

(7) Science Education and Research. With a view to accelerating the growth of the national economy, science education and research should receive high priority. Science and mathematics should be an integral part of general education till the end of the school stage.

(8) Education for Agriculture and Industry. Special emphasis should be placed on the development of education for agriculture and industry.

(a) There should be at least one agricultural university in every State. These should, as far as possible, be single campus universities;

but where necessary, they may have constituent colleges on different campuses. Other universities may also be assisted, where the necessary potential exists, to develop strong departments for the study of one or more aspects of agriculture.

(b) In technical education, practical training in industry should form an integral part of such education. Technical education and research should be related closely to industry, encouraging the flow of personnel both ways and providing for continuous cooperation in the provision, design and periodical review of training programme and facilities.

(c) There should be a continuous review of the agricultural, industrial and other technical manpower needs of the country and efforts should be made continuously to maintain a proper balance between the output of the educational institutions and employment opportunities.

(9) **Production of Books.** The quality of books should be improved by attracting the best writing talent through a liberal policy of incentives and remuneration. Immediate steps should be taken for the production of high quality text-books for schools and universities. Frequent changes of text-books should be avoided and their prices should be low enough for students of ordinary means to buy them.

The possibility of establishing autonomous book corporations on commercial lines should be examined and efforts should be made to have a few basic text-books common throughout the country. Special attention should be given to books for children and to university level books in regional languages.

(10) **Examinations.** A major goal of examination reform should be to improve the reliability and validity of examinations and to make evaluation a continuous process aimed at helping the student to improve his level of achievement rather than at 'certifying' the quality of his performance at a given moment of time.

(11) **Secondary Education.** (a) Educational opportunity at the secondary (and higher) level is a major instrument of social change and transformation. Facilities for secondary education should accordingly be extended expeditiously to areas and classes which have been denied these in the past.

(b) There is need to increase facilities for technical and vocational education at this stage. Provision of facilities for secondary and vocational education should conform broadly to requirements of the developing economy and real employment opportunities. Such linkage is necessary to make technical and vocational education at the secondary stage effectively terminal. Facilities for technical and vocational education should be suitably diversified to cover a large number of fields such as agriculture, industry, trade and commerce, medicine and public health, home management, arts and crafts, secretarial training, etc.

(12) University Education. (a) The number of whole-time students to be admitted to a college or university department should be determined with reference to the laboratory, library and other facilities and to the strength of the staff.

(b) Considerable care is needed in establishing new universities. These should be started only after an adequate provision of funds has been made for the purpose and due care has been taken to ensure proper standards.

(c) Special attention should be given to the organisation of post-graduate courses and to the improvement of standards of training and research at this level.

(d) Centres of advanced study should be strengthened and a small number of 'clusters of centres' aiming at the highest possible standards in research and training should be established.

(e) There is need to give increased support to research in universities generally. The institution for research should, as far as possible, function within the fold of universities or in intimate association with them.

(13) Part-time Education and Correspondence Courses. Part-time education and correspondence courses should be developed on a large scale at the university stage. Such facilities should also be developed for secondary school students, for teachers and for agricultural, industrial and other workers. Education through part-time and correspondence courses should be given the same status as full-time education. Such facilities will smoothen transition from school to work, promote the cause of education and provide opportunities to the large number of people who have the desire to educate themselves further but cannot do so on a full-time basis.

(14) Spread of Literacy and Adult Education. (a) The liquidation of mass illiteracy is necessary not only for promoting participation in the working of democratic institutions and for accelerating programmes of production, especially in agriculture, but for quickening the tempo of national development in general. Employees in large commercial, industrial and other concerns should be made functionally literate as early as possible. A lead in this direction should come from the industrial undertakings in the public sector. Teachers and students should be actively involved in organising literacy campaigns, especially as part of the Social and National Service Programme.

(b) Special emphasis should be given to the education of young practising farmers and to the training of youth for self-employment.

(15) Games and Sports. Games and sports should be developed on a large scale with the object of improving the physical fitness and sportsmanship of the average student as well as of those who excel in this department. Where playing field and other facilities for

developing a nation-wide programme of physical education do not exist, these should be provided on a priority basis.

(16) **Education of Minorities** : Every effort should be made not only to protect the rights of minorities but to promote their educational interests as suggested in the statement issued by the Conference of the Chief Ministers of States and Central Ministers held in August 1961.

(17) **The Educational Structure**. It will be advantageous to have a broadly uniform educational structure in all parts of the country. The ultimate objective should be to adopt the 10+2+3 pattern, the higher secondary stage of two years being located in schools, colleges or both according to local conditions.

5. The reconstruction of the education on the lines indicated above will need additional outlay. The aim should be gradually to increase the investment in education so as to reach a level of expenditure of 6 per cent of the national income as early as possible.

6. The Government of India recognises that reconstruction of education is no easy task. Not only are the resources scarce but the problems are exceedingly complex. Considering the key role which education, science and research play in developing the material and human resources of the country, the Government of India will, in addition to undertaking programmes in the Central sector, assist the State governments for the development of programmes of national importance where co-ordinated action on the part of the States and the Centre is called for.

7. The Government of India will also review, every five years the progress made and recommend guidelines for future development.

General Observations

An Important Milestone. The NIE Journal in its editorial Vol. III, Number 1, Sept. 1968 hailed it as an important milestone in our progress towards improving the quality and content of education in the country. The editorial observed "The fact that the policy was evolved after a broad consensus of opinion among Vice-Chancellors of Indian Universities, leading educationists, State Education Ministers and other representative interests cannot be easily ignored. Nor can the significance of its general acceptance by pedagogical experts be minimised. As a document of educational development it is strikingly comprehensive and seeks to give a sense of direction for future policy growth. We had many committees and commissions on education but for the first time since Independence we have a National Policy which provides an avowed outline of educational development in important fields."

The document has been hailed as a milestone because :—

1. It has rightly put emphasis on equalisation of educational opportunity and provision of educational facilities in rural and backward areas.

2. The decision to raise the investment in education from the present level of about 2·7 per cent to 6 per cent of the national income is a praiseworthy one.
3. Its recommendation for a uniform educational structure in all parts of the country, with the ultimate objective of having a 10-year schooling period up to the high school, a two-year higher secondary course, and a three-year period for the degree course is to be commended.
4. Its stress on academic freedom of teachers to pursue and publish independent studies and researches and to speak and write about significant national and international issues is an other redeeming feature.

Educational Planning in India

Meaning of Planning

American Association of School Administrators in 'Staff Relations in School Administrators' observes that planning involves :

- (a) the definition and clarification of purposes and scope of operation ;
- (b) investigation to reveal conditions affecting the achievement of purposes ;
- (c) analysis to determine the meaning of the facts and to forecast effects of possible courses of action on achievement of purpose ; and
- (d) decision making to set the course of the enterprise as indicated by the process of purpose defining, investigation and analysis.

Nature of the Planning Process. The following decision reached at Santiago Conference (1962) explains the nature of the planning process, "The overall planning of education is a continuous, systematic process, involving the application and co-ordination of social research methods and of principles and techniques of education, administration, economics and finance, with the participation and support of the general public in education for the people, with definite aims and in well-defined stages and to provide everyone with an opportunity of developing his potentialities and making the most effective contribution to the social, cultural and economic development of the country."

Seven Phases of Educational Planning. Eugene B. Elliot and Earl E. Mosier have described the phases of educational planning in "Organisation of Planning for Education" as under :—

1. Tentatively stating objectives based upon educational needs.

2. Determining the present status of education in the particular community.
3. Formulating a specific programme of objectives for the school.
4. Determining a course of action necessary to attain the objectives.
5. Translating the plan into action.
6. Conducting constant appraisals for the effectiveness of the programme.
7. Replanning as appraisals indicate this to be necessary or desirable.

Objectives of Planning. The main object of educational planning is to get the most and best educational results for the effort expended, and to maximise education's contributions to each individual and to the whole society. According to Philip H. Coombs, 'Educational planning is nothing more than a rational process of setting clear objectives, choosing the most efficient and effective means for pursuing them, then following through with practical action.'

Essentials of Educational Planning and Significance of Each Letter Forming Educational Plan

These may be explained as under :—

E : stands for (a) Economics of education and educational considerations ; (b) Efficient use of economic resources ; and (c) Employment and educational policy.

D : stands for (a) Data ; (b) Division of responsibility ; and (c) Dignity of Labour.

U : stands for Unbiased growth of different sectors.

C : stands for (a) Contents of education ; and (b) Constitutional provisions.

A : stands for (a) Administrative machinery ; (b) Article 45 of the Constitution ; (c) Attitude formation ; and (d) Adult education.

T : stands for (a) Target-fixing ; and (b) Technology and education.

I : stands for (a) International Co-operation ; (b) Investment in man is more important than investment in machinery ; and (c) Indigenous manufacture of education equipment.

O : stands for Objectivity.

N : stands for a National System of Education.

A : stands for Advisory Bodies.

L : stands for (a) Liaison between various authorities ; and (b) Long-term and short-term plans.

P : stands for (a) Perspective plan ; (b) Public participation ;
 (c) Private and Public sectors ; and (d) Planning and Research Bureau.

L : stands for Legislation.

A : stands for Appraisal of the Plan.

N : stands for New Objectives.

History of Educational Planning in India

India has now a record of over 20 years of planning. Every State Government has its plan and the Central Government has its plan. The Central Government actively assists the States in formulating their plans. The plans of the Central and the State Governments, and the 'public' and the 'private' sectors are co-ordinated and finalised after detailed discussions by the Planning Commission, which is a national body. The Planning Commission draws up a long-term perspective plan and a more immediate Five-Year Plan of development. These plans are approved by the National Development Council which comprises *inter alia* the Prime Minister and the Chief Ministers of different States. The approved plan thus becomes the highest policy declaration of what is proposed to be achieved in the next five years and how. The Five-Year Plan specifies the allocation for education, chalks out the policies and the programmes and sets targets of achievements. There is a provision for periodic appraisal of plan performance and every year 'Annual Plans' are drawn up with due modifications but within the framework of the Five-Year Plan.

The first four years of independence witnessed great educational expansion on a year to year budgetary planning till the birth of the National Planning Commission in 1951, the year of launching the first Five-Year Plan. The four Five-Year Plans provide a graphic description of the successive educational plan programmes during 1951-56, 1956-61, 1961-66 and 1969-74. In the years from 1966 to 1969 the general economic conditions in the country were very difficult. The country had to divert her energies to fight drought and near famine aftermath. This resulted in the reduction of long-term planning to three short annual plans.

Origin of Educational Planning in India—National Planning Committee. After the introduction of provincial autonomy in the country under the Government of India Act, 1935 and the acceptance of office by the Congress in nine out of eleven provinces in 1937, the National Planning Committee was set up in 1938 under the Chairmanship of Pandit Jawaharlal Nehru. The committee started working in 1939. Two committees were set up in the field of education—one for general education with Dr. Radhakrishnan as its Chairman and the other for technical education and development of research under the Chairmanship of Dr. M. N. Saha. A tentative report prepared by the subcommittee on general education was considered by the National Planning Committee but the report of the subcommittee on technical

education and development of research could not even be considered. However with the arrest of Pt. Nehru in 1940 and other leaders in due course the work of the committee came to a standstill. No useful work could be done till 1947 when this committee was practically wounded up. A volume on education was brought out in 1948 by the General Secretary of the committee. The volume contained a broad outline of the work done in planning educational development. To quote Shri J. P. Naik, "The work of the National Planning Committee did not have any impact on educational planning in India. Its main significance is historical : it was the first organisation to think of preparing a plan of educational development as a part of an overall plan of socio-economic development."

The Sargent Plan. The year 1944 was a landmark in the history of educational planning in India. Sir John Sargent, the then Educational Commissioner to the Government of India, prepared a comprehensive educational plan that contained proposals on different aspects of educational reconstruction, such as basic education, adult education, welfare of school children, school buildings, recruitment, training and conditions of service of teachers and the technical education. The plan was presented to the Central Advisory Board of Education and was approved with slight modifications. "This document popularly known as the Sargent Plan, is the first comprehensive plan of educational development ever to be prepared in the country," observes J. P. Naik.

Main Features of this Plan

1. It was spread over a period of 40 years (1945-84).
2. An annual expenditure of Rs. 3,126 million was to be incurred on the then estimated population of 290 million i.e., Rs. 11 per head of population at the 1939 prices.
3. Provision of facilities for one child in every 21 at the pre-primary stage.
4. Free and compulsory education on basic lines for all children in the age-group 6-11.
5. Compulsory senior basic education for three years for four-fifths of children in the age-group 11-14.
6. Secondary education for selected and gifted children (for one child out of every five who completed the primary course).
7. University education for one out of every fifteen students who completed the secondary school.
8. A fair-sized programme of technical education and the provision of other ancillary services.
9. Liquidation of adult illiteracy.

The Report thus estimated that the total annual expenditure on the educational system proposed by it would come to Rs. 3126 million out of which a sum of about Rs. 356 million (or about 11%) would come from fees and other sources and the balance of Rs. 2770 million (or about 89%) would have to be provided from public

taxation. The details of these estimates can be seen at a glance in the following table.

(Rs. in millions)

	<i>Estimated gross annual expenditure</i>	<i>Estimated income from sources other than public funds</i>	<i>Estimated net expenditure to be met from public funds</i>
1. Basic (Primary and Middle) Education	2,000	—	2,000
2. Pre-Primary Education	32	—	32
3. High School Education	790	290	500
4. University Education	96	29	67
5. Technical Commercial and Art Education	100	20	80
6. Adult Education	30	—	30
7. Training of Teachers	62	17	45
8. School Medical Service	—	—	—
9. Education of the Handicapped	—	—	—
10. Recreative and Social Activities	10	—	10
11. Employment Bureaux	6	—	6
12. Administration	—	—	—
Total	3,126	356	2,770

Critical Analysis

1. The estimates were based on pre-Second World War level of prices and must be adjusted for any subsequent rise in them.
2. The estimates were based on an estimated population of 290 million and no allowance was made for any increase in population, although the period to be covered by the plan was deemed to extend over 40 years.
3. The plan gave estimates for the recurring expenditure only.
4. The plan provided for the intensive development of certain areas and such an approach is hardly suitable for a democratic country like ours.
5. The plan did not give concrete suggestions to find out the resources for the financing of the plan.
6. The plan was spread over too long a period. It was deemed to extend over 40 years. The Kher Committee appointed by the Central Advisory Board of Education examined the matter and recommended that the plan should be implemented in a period of 16 years instead of 40.

EDUCATION AND THE FIRST PLAN 1951-56

(Based on the Summary of the First Five-Year Plan)

Guiding Principal Factors

1. Role of Central Government. In view of the present limited resources the Centre in the field of pre-university education, should confine itself to helping such of the States as are willing to conduct such activities like research in educational methods, training of especially selected personnel, etc. which have national significance and which would lay sound foundations for a subsequent stage of expansion when more funds become available. To watch, guide and co-ordinate these activities, the Centre should have a standing expert committee to advise it.

2. Promotion of Federal Language. Another very important activity which the Centre has to engage in is the promotion of the federal language.

3. Need for Self-Reliance. In view of the inadequacy of resources, a large share of responsibility for social services will have to be borne by the people themselves.

4. Role of Local Bodies. There should be progressive decentralisation in the administration of education at lower level, consistent with a broad uniformity of educational policy, and efficient and impartial administration.

5. Role of Private Bodies. It should be a major aim of State policy to help private agencies to develop their capacity fully and function effectively in view of their experience of social work (including education), their capacity to manage affairs cheaply, and their comparative freedom from red-tape.

6. Priorities. While it is impossible to lay down a strict order of priorities, in view of the closely interlinked character of the various stages of education, as well as the widely varying conditions in different parts of the country, it may broadly be recommended that the highest priority should go to the improvement and remodelling of existing institutions on right lines. To an extent this will necessitate giving high priority to experiments and research in improved educational methods, the training of teachers and the preparation of literature. The special needs of the plan and the great dearth of existing facilities will require high priority for basic and social education, technical and vocational education at lower level and the development of facilities for training high-grade technicians in certain selected fields. High priority to improvement of standards and the development of post-graduate work and research should be given in university education.

7. Broad Targets. The quantitative targets that should be aimed at during the period of the plan should be the provision of educational facilities for 60 per cent of the age-group 6-11, to be developed

as early as possible to bring children up to the age of 14 into schools, and for 15 per cent of the relevant age-group to secondary education. In the field of social education, we should attempt to bring 30 per cent of the people of the age-group 14-40 within the purview of social education in the wider sense of the term. In the case of girls the respective targets should be 40 per cent, 10 per cent, and 10 per cent.

Pre-school Education. Government can accept only limited responsibility in the field of pre-school education, confined to research, in evolving methods suited to Indian conditions, training of teachers, helping private agencies who take up this work in the rural areas, by grant-in-aid and running a few model 'BALWADIS' in each State.

Basic Education. To improve the technique of the basic education, and to develop methods of training teachers of average ability and ordinary educational qualifications, at least one group of model basic institutions should be opened in each State. Each group should consist of a number of pre-basic and basic schools, a post-basic school (wherever possible), a Teachers' Training school, and a Teachers' Training college. In addition, a few experimental basic schools should also be opened in urban areas as well to discover modifications necessary in the rural pattern to make it suitable for urban conditions.

All States should run, wherever conditions permit, 8-year full-fledged basic schools instead of 5-year schools.

Articles produced by basic schools should be generally for consumption by the local community and if there is proper adjustment there should not be any unsold balance. The services of the general machinery that may be set up for the disposal of cottage industries products should be available to these schools.

Secondary Education. Economic activities like agriculture, cottage industries, small-scale industries, etc., should be encouraged in secondary schools as a sound educational measure and, incidentally, to help to recover at least a part of the recurring expenditure.

University Grants Commission. A University Grants Commission should be instituted as recommended by the University Education Commission. Its functions should include the ensuring of minimum standards of teaching and internal administration in the various universities, the co-ordination of post-graduate and research work in different universities, and seeing that the tendency to open new universities without adequate finances is resisted.

Overcrowding in Colleges. We must develop and apply selective tests on a large scale so that nobody is allowed to go up for higher education who is not fit to profit by it.

University Education. Steps should be taken to correct the one-sidedness of present university education so that arts students have basic scientific knowledge and science students the essential knowledge of the humanities.

Rural Universities. The Central Government should help to establish during the period of the Plan at least one rural university as recommended by the University Education Commission.

The degree of a rural university should have the same validity in the matter of public appointments as a degree from other universities.

Social Education. Social Education should be woven round the overall national priorities like the organisation of co-operatives, agricultural extension work, co-operative farming, etc.

Teachers' training colleges should take up research in methods of imparting literacy. The centre should provide model guide books for workers and prepare pamphlets on certain standard subjects, such as health, democratic citizenship, co-operatives, etc.

Engineering and Technological Education. Until the Technical Manpower Committee of the All-India Council for Technical Education has assessed the country's requirements, it would be advisable to consolidate the work in the existing institutions (by improvement of physical facilities and reorientation of training) and not to embark upon new ventures excepts in certain specialised fields.

Facilities should be provided at all levels for young people entering industry to continue their education, concurrently with the discipline and experience of work, by part-time study during day time or in the evenings.

Education for Commerce and Management. A comprehensive survey should be made of the state of commercial education in the country and the standards of the various courses provided.

Women's Education. While women should have equal opportunities with men in all fields of education, special facilities should be provided for them in fields for which they have special aptitudes.

Short-term courses for general education and training in crafts should be organised for adult women.

At the secondary and even at the university stage women's education should have a vocational or occupational basis as far as possible. There should be co-ordination between planning for women's education and planning for cottage industries.

Labour Service by Students. A certain amount of manual work as a part of the daily routine and a short-term stay in a labour camp once a year should be features of the curriculum throughout the educational period.

Teachers' Salary and Conditions of Service. State Governments should examine the position of teachers' salaries and, within the limits of their resources, try to raise their scales of pay.

Teachers should be given additional facilities in the form of free accommodation, fee concessions for their children's education, etc. In village schools, every teacher should be given a plot of land where he and his family can grow their own vegetables. Other supplementary sources of income should also be thought of.

Physical Health. Proper provision should be made in educational institutions for maintaining the physical and mental health of students. A National College of Physical Education for training higher personnel for physical education and community recreation and leadership should be set up.

Norms of physical fitness—comprehending ability, strength and endurance—should be laid down for boys and girls at every stage of education. These norms should be worked out by experts and applied to different groups of people with due regard to variations in economic, climatic and other conditions.

Research in physical education should be conducted especially in regard to the following problems :

- (a) the relative value of different sports, games and exercises from the physiological, social and educational points of view ;
- (b) the value of the YOGIC system of exercises; and
- (c) appropriate syllabuses of physical education for different age and vocational groups.

SECOND FIVE-YEAR PLAN 1956-1961

Education and Economic Development. The chapter on 'education' begins with these remarks. 'The system of education has a determining influence on the rate at which economic progress is achieved and the benefits which can be derived from it. Economic development naturally makes growing demands on human resources and in a democratic set up it calls for values and attitudes in the building of which the quality of education is an important element.'

Main Features of the Programme

1. Emphasis on basic education.
2. Expansion of elementary education.
3. Diversification of secondary education.
4. Improvement of standards of college and university education.

5. Expansion of facilities for technical and vocational education.
6. Implementation of social education and cultural development programmes.

Elementary Education. The Report observed, 'The problems of education at the elementary level are mainly two : the expansion of existing facilities and the reorientation of the system of education on basic lines. Both are equally urgent tasks and vital to social and economic development.'

Other observation made by the Commission was regarding wastage at the primary level. The wastage exceeds 50 per cent at the primary stage. Thus, out of 100 pupils who join the first class at school scarcely, 50 reach the fourth class, the rest dropping out before completing four years at school. The wastage is greater in the case of girls.

Closely allied to the problem of wastage is that of stagnation, that is, a pupil continues in the same class for more than the normal period.

To prevent wastage, the introduction of compulsion was considered essential and the Commission observed that its enforcement might be easier if busy agricultural seasons coincided with school holidays as far as possible. Another step recommended to prevent wastage was the giving of a practical bias to education as far as possible.

'The principal remedy for stagnation lies in improving the quality of teachers and teaching techniques, including understanding of human relations and personality problems.'

Girls' Education. The Commission felt that the progress of girl's education at both the age-groups 6-11 and 11-14 lagged far behind in the First Plan.

One of the important reasons for this, according to the Commission, was that the public opinion in every part of the country was not equally alive to the importance of girls' education. The Commission suggested the following methods for the rapid spread of girls' education :—

1. Special efforts to be undertaken at educating parents.
2. Education to be made more closely related to the needs of girls.
3. Situation in each area to be studied separately.
4. Shift system to be introduced—one shift working for boys and the other for girls.
5. The task of training women teachers to be approached as a matter of urgency.

6. Provision of housing facilities for women teachers to be made.

7. Opportunities for part-time employment for married women to be provided to draw them into the teaching profession.

Buildings. The Planning Commission suggested the following approach :

1. Austere standards to be adopted.

2. Help of the local community for the construction of buildings to be secured.

3. Experiments in cheap designs for schools to be carried out.

4. Relaxation in the prescribed standard to be made for starting a school in a village.

5. 'Panchayat Ghars' and village temples to be utilised for starting schools.

Levy of Educational Tax. It was recommended that to enable local communities to shoulder in some measure the continuing responsibility for the construction and maintenance of school buildings each State should consider enacting legislation to enable local authorities (including village panchayats) to levy a tax for education.

THIRD FIVE-YEAR PLAN 1961-66

In the programme of education the main emphasis was on the following :—

1. Provision of facilities for universal education for the age-group 6-11.

2. Improvement of science education at the secondary and university stages.

3. Training of teachers at all grades.

4. Expansion of technical education.

Basic Education. Main steps taken in this direction were :

(i) The process of modelling all elementary schools on the basic pattern was carried forward.

(ii) Attempts were made to utilise development activities undertaken in the vicinity of the school for educational purposes. This helped in enhancing the value of the education given and reducing the additional costs on account of land, equipment, etc.

(iii) The programme of orientation towards the basic pattern was accelerated.

(iv) Model senior basic schools in selected development blocks were established.

(v) A number of model basic schools were established in urban areas also.

Secondary Education. The three main directions in which the reorganisation of secondary education continued during the Third Plan are.

(i) Increase in the facilities for science education.

(ii) Improvement of the multipurpose schools established during the Second Plan and increase in their number to a limited extent.

(iii) Setting up new secondary schools as higher secondary institutions and the conversion of existing secondary schools to this pattern to a limited extent.

(iv) Formulating programmes for effecting reform of examination system.

University Education. For the improvement of the quality of university education, following measures were initiated.

1. Introduction of the three-year degree course.
2. Improvement of libraries and laboratories.
3. Development of post-graduate studies and research.
4. Provision for hostel facilities.
5. Institution of merit and research scholarships.
6. Improvement of salary scales of teachers.
7. Organisation of tutorials and seminars.
8. Greater attention to the welfare of students.
9. Opening of evening colleges.
10. Starting correspondence courses.

Technical Education. Increasing emphasis was put on mechanical, electrical and chemical engineering alongwith the need for training specialists in the field of mining, metallurgy and other technologies. Annual intake of degree and diploma holder students was increased. The schemes of training fellowships in selected engineering colleges and foreign studentships for graduates who return to teaching posts initiated in the second plan, continued in the third plan. The provision for scholarships in engineering institutions was increased. Loan scholarships which can be repaid in easy instalments were provided in large numbers.

Nature of Financial Provision in the Plans

In every plan there is provision for funds for the development of education in addition to the resources provided for maintaining insti-

Financial Provision for Education and Training

(Rs. in crores)

	<i>First Plan (1951-56)</i>	<i>Second Plan (1956-61)</i>	<i>Third Plan (1961-66)</i>
General Education (including cultural programmes)	133	208	418
Technical Education	20	48	142
Vocational Training (DGE & T)	—	13	49
Medical Education	22	36	57
Agricultural Education (including animal husbandry)	5	11	20
Others (Ministries of CD & C. Rehabilitation & Home Affairs)	22	42	79
(i) Total Education & Training	202	358	765
(ii) Total Plan Provision	1960	4600	7500
(iii) (i) as percentage of (ii)	10·3	7·8	10·2

FOURTH FIVE-YEAR PLAN 1969-70 TO 1973-74

(from *Chapter XVI Education and Manpower)

Education

A suitably oriented system of education can facilitate and promote social change and contribute to economic growth, not only by training skilled manpower for specific tasks of development but what is perhaps even more important, by creating the requisite

*Published by the Planning Commission, Government of India, 1970.

attitudes and climate. Facilities for universal elementary education are a pre-requisite for equality of opportunity.

Pre-School Education. In the field of pre-school education, Government effort will be confined mainly to certain strategic areas such as training of teachers, evolving suitable teaching techniques, production of teaching materials and teachers' guides. In the Social Welfare sector, however, there is a small provision for the opening of balwadis in rural and urban areas.

Elementary Education. The targets of elementary education are set out in Table 1.

In regard to the age-group 11-14, the problem is much more difficult as a large majority of the parents in rural areas withdraw their children from schools. The problem needs special attention in Bihar, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh.

Secondary Education. In the fourth Plan, it is expected to enrol 31 million additional pupils in classes IX-XI. The trend of expansion of facilities at the secondary stage is shown in Table 2.

A major task in the field of post-elementary education is to provide a large variety of vocational courses for children who do not intend to continue their general education beyond the elementary stage. These courses have to be of varying durations, depending upon the trades and vocations proposed to be learnt. The industrial training institutes will meet a part of this demand.

Girls' Education. Sustained efforts to extend education among girls have been made from the First Plan period. Girl students, as a percentage of their population in the relevant age-group, increased from 25 in 1950-51 to 59 in 1968-69 in classes I-V, 5 to 19 in classes VI-VIII and 2 to 10 in classes IX-XI. The gap between the enrolment of boys and girls is still considerable. During the Fourth Plan, the enrolment of girls will be further increased through the organisation of special programmes, the nature of which will vary from State to State.

Teacher Education. At present, the problem of untrained teachers is confined largely to the States and Union Territories in the eastern region. The programmes which need special attention are : improving the quality of teachers for the middle classes and in-service training. Wherever necessary, correspondence courses will be organised for untrained teachers now working in schools. The State Institutes of Education will cooperate in the implementation of these programmes.

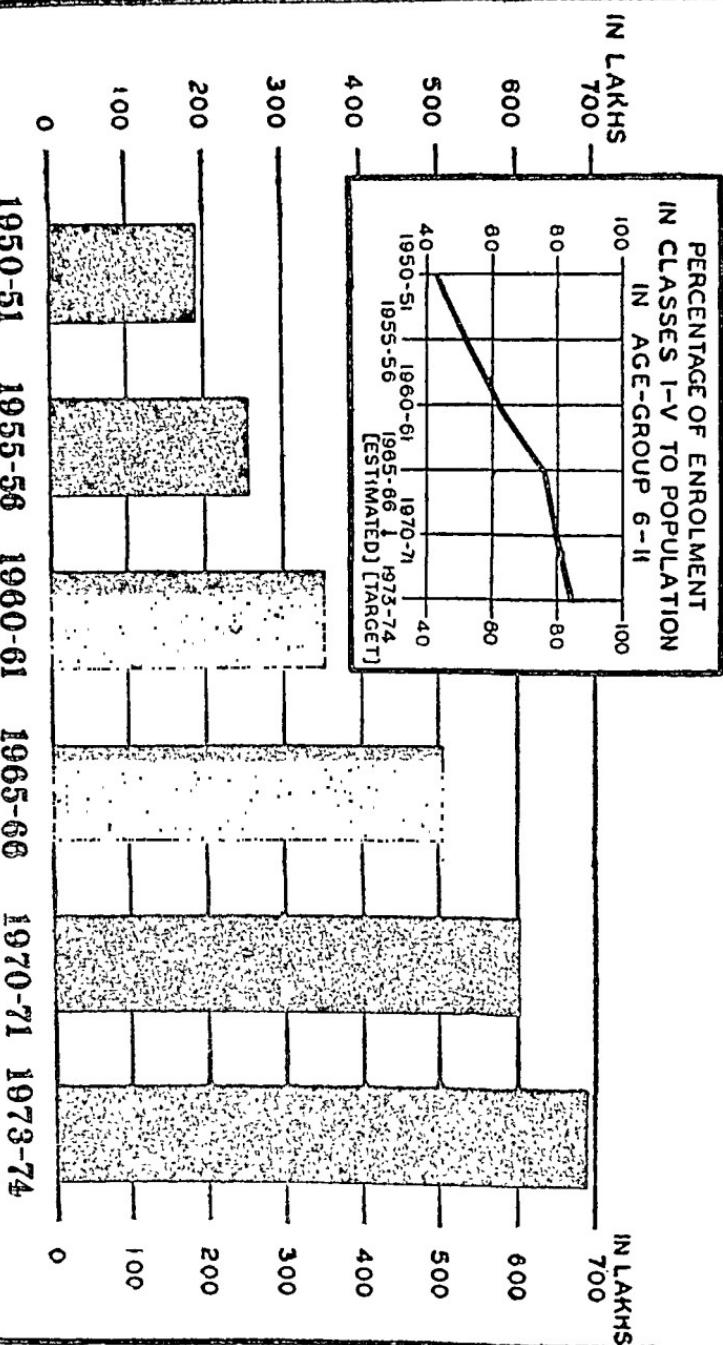
At the secondary stage, the number of teachers in 1968-69 was estimated at 0·525 million of whom 0·381 million or 73% were trained. The training facilities available, at present, at this stage are considered adequate and can be easily expanded if the need arises...

TABLE I
Expansion of Elementary Education

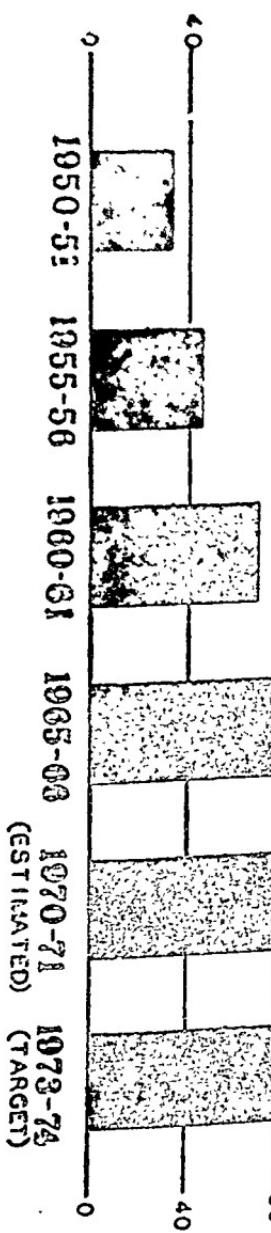
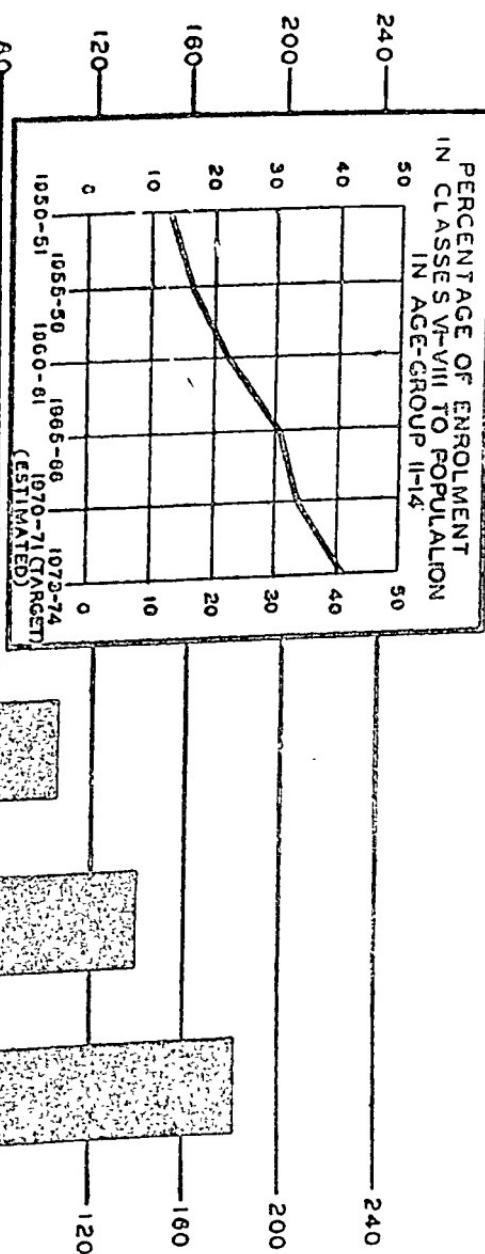
Sl. No.	Stage (age-group)	1960-61		1965-66		1968-69		1973-74	
		Enrolment	Percentage of age-group	Enrolment	Percentage of age-group	Enrolment	Percentage of age-group	Enrolment	Percentage of age-group
(i)	Primary (6-11) Classes I-V								
	1. Total	34.99	62.4	50.47	76.7	55.49	77.3	68.58	85.3
	2. Boys	23.59	82.6	32.18	96.3	34.92	95.2	41.25	99.6
(ii)	Middle (11-14) Classes VI-VIII	11.40	41.4	18.29	56.5	20.57	58.5	27.33	70.1
	1. Total	6.70	22.5	10.53	30.9	12.27	32.3	18.10	41.3
	2. Boys	5.07	33.2	7.68	44.2	8.76	45.4	12.19	54.3
(iii)	Elementary (6-14) Classes I-VIII	1.63	11.3	2.85	17.0	3.51	18.8	5.91	27.7
	1. Total	41.69	48.7	61.00	61.0	67.76	61.7	86.68	69.8
	2. Boys	28.66	65.2	39.86	78.5	43.68	78.0	53.44	83.7
	3. Girls	13.03	30.9	21.14	43.3	24.08	44.7	33.24	55.1

PROGRESS OF LOWER PRIMARY EDUCATION

ENROLMENT IN CLASSES I-V



PROGRESS OF HIGHER PRIMARY EDUCATION ENROLMENT IN CLASSES VI-VIII



PROGRESS OF SECONDARY EDUCATION

ENROLMENT IN CLASSES IX - XI/XII

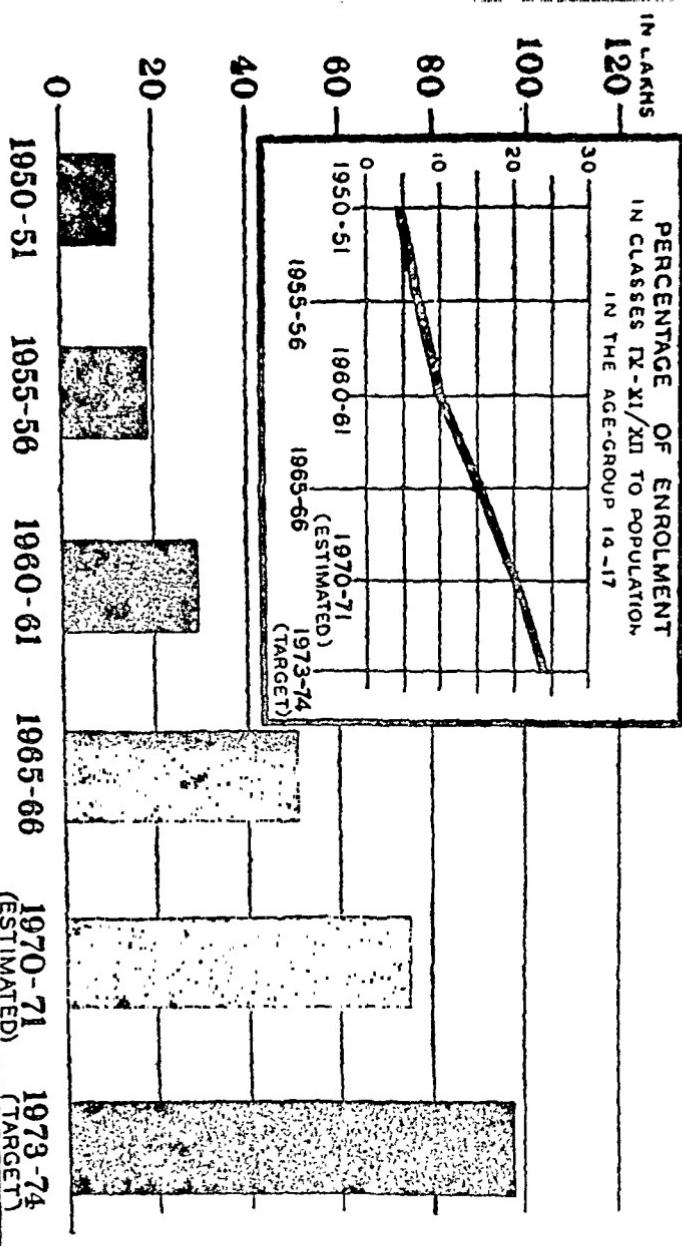


TABLE 2
Expansion of Secondary Education

Year	Enrolment (in millions)			Percentage of age-group (14-17)		
	Boys	Girls	Total	Boys	Girls	Total
1960-61	2.47	0.56	3.03	17.5	4.3	11.1
1965-66	4.08	1.20	5.28	25.6	7.9	17.0
1968-69	4.95	1.63	6.58	28.5	9.8	19.3
1973-74 (target)	7.00	2.69	9.69	34.3	13.7	24.2

The main programmes during the Fourth Plan will be to improve standards of teacher education at this level and to organise a large-in-service education programme especially for mathematics and science teachers.

National Council of Educational Research and Training and State Institutes of Education. To work out the programmes of qualitative improvement at the school stage, greater co-ordination will be effected between the National Council of Educational Research and Training (NCERT) and the State Institutes of Education. Most of the States propose to bring under the States Institutes of Education the various institutions set up to guide the programmes of school improvement.

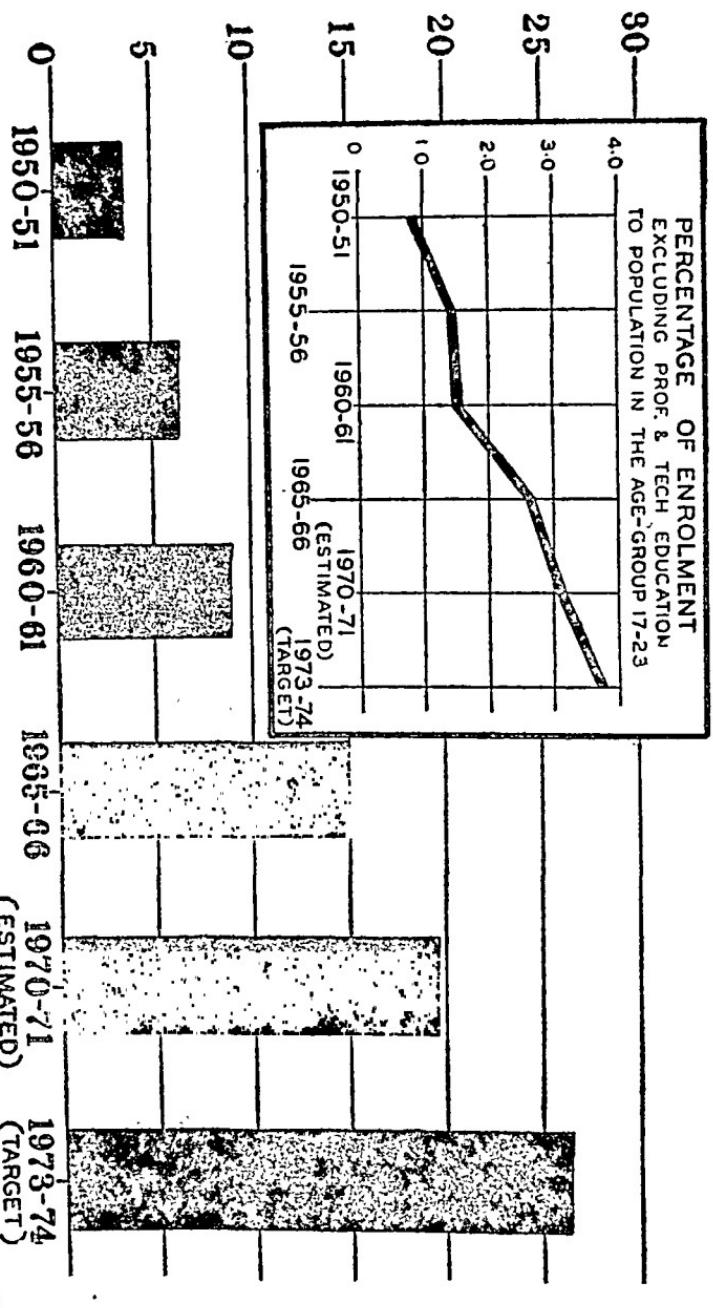
Higher Education. The additional enrolment in the Fourth Plan is estimated to be about one million. Of this, 0.15 million students will be provided education through correspondence courses, evening colleges and part-time classes.

During the Fourth Plan, the main emphasis will be on consolidation and improvement of higher education through the strengthening of staff and library and laboratory facilities.

The estimate of university enrolment are set out below.

PROGRESS OF UNIVERSITY EDUCATION

ENROLMENT EXCLUDING PROFESSIONAL AND TECHNICAL EDUCATION



Expansion of University Education

<i>Sl. No.</i>	<i>Stage (age-group)</i>	<i>1960-61</i>	<i>1965-66</i>	<i>1968-69</i>	<i>1973-74</i>
	Universities' Colleges (age-group 17-23)				
1.	Total enrolment* (million)	0·74	1·24	1·69	2·66
2.	Percentage of age-group	1·5	2·3	2·9	3·8
3.	Enrolment in science courses (million)	0·19	0·51	0·68	1·19
4.	Enrolment in science courses as percentage of total enrolment	25·7	41·1	40·2	44·7

Scholarships and Fellowships. The present schemes of scholarships administered by the Central Government like the National Scholarships Scheme, the National Loan Scholarships Scheme, National Scholarships for the Children of School Teachers and Merit-Scholarships in Residential Schools will be stepped up. The University Grants Commission will also continue to provide fellowships for post-graduate education and research.

Science Education. Enrolment in science subjects which was about 26 per cent of the total enrolment at the university stage (including pre-university classes) in 1960-61, rose to 40 per cent in 1968-69 and is estimated to rise further to 45 per cent in 1973-74. Science education will be expanded and improved at elementary, secondary and university stage...The administration and supervision of science programmes will be strengthened and informal activities encouraged through science clubs and science fairs.

Adult Literacy. Efforts will be made to spread literacy amongst adults through mobilisation of voluntary effort and local community resources. Pilot projects will be initiated in selected districts to begin with and the programme will be extended to other areas in the light of experience. The further development of television and the experiments with satellite communications, which are to begin from 1972-73, may have significance for education, especially adult education.

Language Development and Book Production. The three-language formula will be progressively implemented.

*Arts, science and commerce subjects excluding intermediate students of the U.P. Board but including the pre-university classes run by the universities.

Two important programmes are contemplated for book production ; the production of books in modern Indian languages, with a view to their adoption as media of instruction at the university stage and the indigenous production of books in English, with a view to reducing our dependence on imported books...At the school stage, intensive efforts will be made to improve the quality of text-books to produce ancillary teaching materials and to make proper arrangements for the distribution and sale of text-books. Three modern printing presses will be set up to print school text-books. A number of State Governments propose to set up autonomous book production corporations. Emphasis will also be placed on the production of children's books to promote national integration and develop their interest in science.

Cultural Programmes. The existing programmes for the development of the three national Akademis, the Archaeological Survey of India and the National and other museums will be stepped up. In addition, replicas and prints of museum and archaeological objects will be supplied to selected institutions to increase the awareness of our cultural heritage among students.

Youth Services. Youth services will be developed, both for students and non-students, to meet their needs in respect of personal development, idealistic yearnings and channelisation of energies—intellectual, emotional and physical.

Employment. Also programmes of vocational guidance and counselling will be stepped up by strengthening the University Employment information and Guidance Bureaux and bringing them into closer contact with employing agencies. At the school stage, provision for vocational guidance will be stepped up by the Employment Service in collaboration with the educational authorities.

Planning, Administration and Evaluation Machinery. To implement educational programmes effectively, the administrative machinery will be streamlined. The strength of the cadres, their recruitment and training policies and the incentive provided to them at various levels as well as the remedial measures required will be reviewed. The work-load of supervisors will be examined and the concept of supervision broadened to include professional guidance to teachers. Provision will be made for the training and re-training of administrative cadres....The task of detailed planning will be progressively shifted to the direct level and individual institutions will be encouraged to plan and implement their own programmes of development.

Outlays

Rs. 822·6 crores have been provided in addition to an average annual non-Plan expenditure of Rs. 550 crores. Of the Plan outlay Rs. 551·66 crores (67 per cent) will be in the State sector, Rs. 32·40 crores (4·0 per cent) in the Centrally sponsored sector and Rs. 238·60

crores (29·0 per cent) in the Central Sector. According to the existing trends, about Rs. 150 crores are likely to be available from non-Government sources, which include fees, contributions by local bodies and endowment. In addition, education cess could be levied for elementary education and local resources mobilised for school buildings, school improvement, and mid-day meals.

MANPOWER

Ideally educational development at the higher level should be broadly related to the pattern of jobs and the estimates of demand in the economy for educated manpower.....This is important both for the individual and the society. The individual is enabled to take decisions about future careers with the assurance that his training will be put to proper use and he would be productively employed. The gain to society flows from the fact that a timely view of educated manpower required to achieve the varied tasks of economic development makes it possible to provide adequately, yet not excessively, for the scale and pattern of educational development which will best serve the purpose.

The provision of educational facilities to meet the estimated manpower requirements of some of the important categories is discussed below.

Medical Personnel. By the end of the Fourth Plan, the number of medical colleges is expected to increase to 103, with an admission capacity of 13,000.

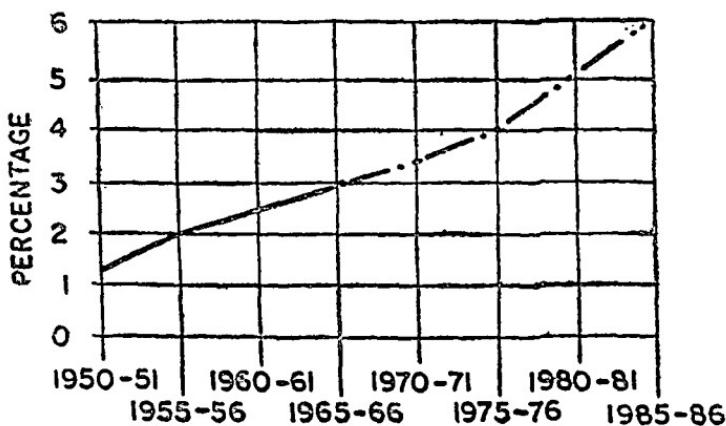
The stock of doctors increased from an estimated 70,000 in 1960-61 to 86,000 in 1965-66 and to 102,000 in 1968-69. It is estimated that it will increase to 138,000 in 1973-74. The doctor-population ratio in 1968-69 was approximately 1 : 5200. It is expected that by the end of the Fourth Plan a doctor-population ratio of 1 : 4300 will be reached and five years later of 1 : 3700.

Agricultural Personnel. There has been a rapid expansion of facilities for the training of agricultural and veterinary graduates to meet the requirements of trained manpower for agricultural development.

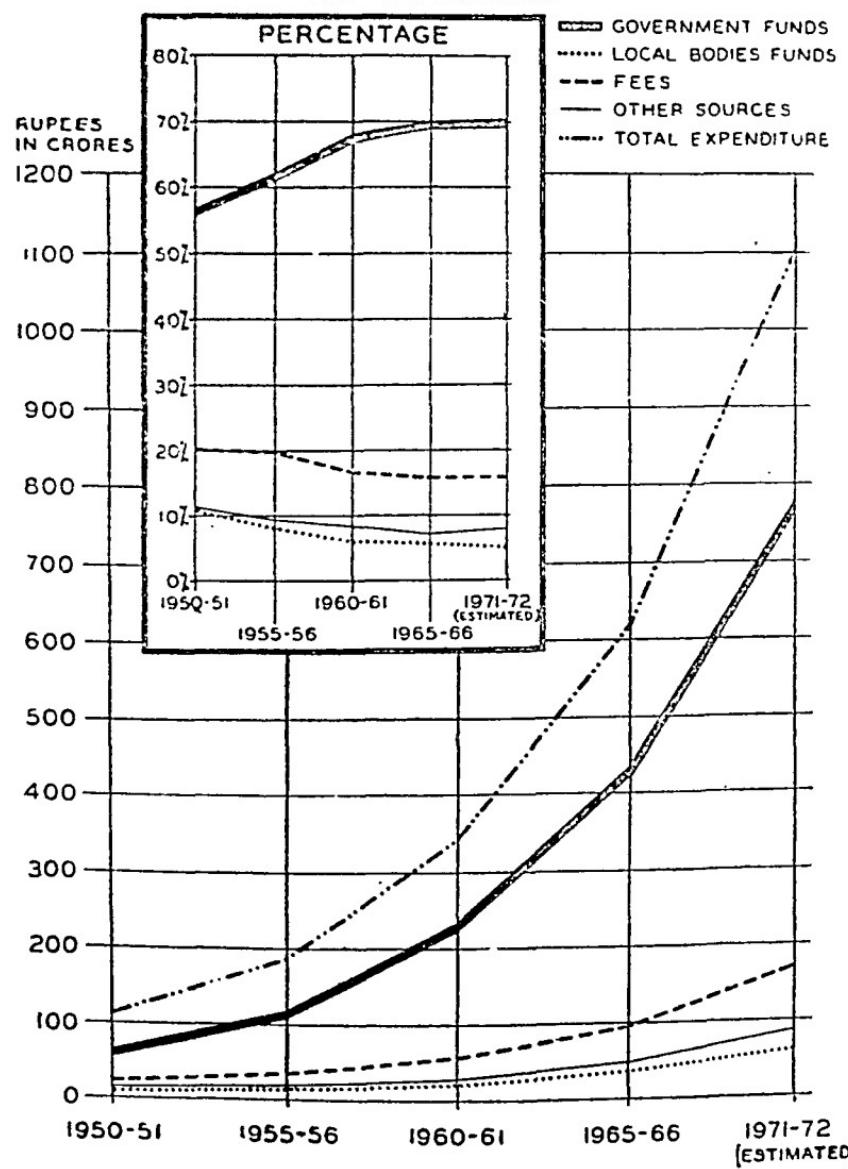
The stock of agricultural and veterinary graduates has increased from about 14,000 and 5,000 in 1960-61 to 32,000 and 9,300 respectively in 1965-66. On the basis of the present intake the stock of agricultural and veterinary graduates should increase to 65,000 and 15,000 respectively in 1973-74. It is expected that the requirements will be adequately met.

Engineering Personnel. The existing facilities for engineering education should be sufficient to meet the Fourth Plan requirements.

EDUCATIONAL EXPENDITURE AS PERCENTAGE OF NATIONAL INCOME



PROGRESS OF EXPENDITURE ON EDUCATION BY SOURCES



EDUCATIONAL EXPENDITURE

Total Educational Expenditure (1965-85)

	1965-66	1970-71	1975-76	1980-81	1985-86
1. National income at 1965-66 prices —Increase assumed at 6 per cent per annum (Rs. in millions)	210,000	281,000	376,000	503,000	673,000
2. Index of growth	100	134	179	240	320
3. Population estimates (Medium projection in millions)	495	560	630	695	748
4. Index of growth	100	113	127	140	151
5. National Income per head of population (Rs.)	424	502	597	724	900
6. Index of growth	100	118	141	171	212
7. Total educational expenditure (Rs. in millions) (increase assumed at 10 per cent per annum)	6,000	9,663	15,562	25,063	40,364
8. Index of growth	100	161	259	418	673
9. Percentage of total educational expenditure to national income	2·9	3·4	4·1	5·0	6·0
10. Index of growth	117	117	141	172	207
11. Educational expenditure per capita (Rs.)	12·1	17·3	24·7	36·1	540
12. Index of growth	100	143	204	298	x444

Thus if education is to develop adequately, educational expenditure in the next 20 years should rise from Rs. 12 per capita in 1955-66 to Rs. 54 in 1985-86 (at constant prices). This implies that the educational expenditure, which increased from Rs. 1,144 millions in 1950-51 to Rs. 6,000 millions in 1965-66, will further rise to Rs. 40,364 millions in 1985-86.

While the broad pattern of educational expenditure in the different sectors of education during the next two or three decades will be to devote two-thirds of the available resources to school education and one-third to higher education, the relative emphasis on programmes should change from decade to decade.

Some Significant Guidelines Suggested by the Kothari Commission on Financing Education

1. Need for Economy. The utmost economy possible should be practised in the construction of buildings.

2. Reduction in the Cost of Producing Equipment. The cost of equipment could be reduced considerably by better designing, large-scale production, improvisation and careful handling to increase its life.

3. Sharing Facilities. Techniques in which certain facilities could be shared in common by a group of schools (*i.e.* a circulating library for rural primary schools) should be encouraged and adopted on a large-scale.

4. Maximum Utilisation of Facilities. Where equipment and facilities become costly and sophisticated, they should be intensively and cooperatively utilised for the largest part of the day and throughout the year.

5. Maximum Use of Educational Buildings. Whenever possible, educational buildings should be put to use for as long as possible in the day and whenever needed, at night as well.

6. Larger Classes. Larger classes and higher pupil-teacher ratios are inevitable for some years to come, and it would only be a disservice to education to adopt the practices of affluent societies in this regard. In a developing economy, we must accept these as facts of life and meet their challenge through the development of appropriate techniques and hard work.

7. Involvement of Each Individual. There is no justification for the continuance of the large wastages which now prevail at every stage. Their reduction should be a definite national target and to that end, programmes for the active involvement of each individual institution in the process should be encouraged. This is the only way to meet the situation.

8. Increased Working Hours. The working day should be longer and the number of working days should be increased. The vacations should be utilised as fully as possible and designated as vacation 'terms'.

9. Provision of Part-Time Education. Programmes of part-time and own-time education should be organised on as large a scale as

possible to meet the increasing demand for education from workers as well as from those who cannot be provided with a place in full-time institutions.

10. Education of the Gifted. The education of the gifted children should be attended to on a top priority basis.

11. Centres of Excellences. With a view to raising quality all round and in all institutions in the shortest time possible, it is essential to concentrate resources, in the immediate future, on the development of some centres of excellence and quality institutions at all stages of education, particularly in secondary and higher education. This programme should be given a very high priority.

12. Manpower Needs and Higher Education. Places in full-time institutions of secondary and higher education should be provided with due regard to manpower needs and maintenance of standards : and admissions to them should be made on the basis of an egalitarian selection.

13. Intensive Utilisation. Sectors of education which have a multiplying effect like post-graduate studies or teacher education or those which have a direct relationship with an increase in productivity such as agricultural and technical education, or those which tend to decrease wastage or intensify utilisation should be intensively utilised.

14. Decentralisation in Authority. Wasteful expenditure which often arises from rigidities of administrative and financial procedures should be avoided by introducing flexibility and adequate decentralisation of authority.

15. Great Emphasis on Human Resources. Greater emphasis should be placed on programmes which need more of human talent, dedication and hard-work (such as preparation of text-books, teaching and learning aids, research, etc.) than on those which involve large investment of physical and financial resources.

16. Institutions of Optimum Size. A vigorous attempt should be made to establish institutions of optimum size at all levels of education because these would be more efficient and less costly.

17. Conducting Research. Since an underdeveloped economy cannot aspire to match the levels of per capita educational expenditure of the developed ones, the problems of educational reconstruction in India can be tackled only on the basis of an approach which meets our special situation. A mere imitation of some of the techniques and programmes of education in developed societies will not meet our requirements. The complexity of our problems, and the necessity of connecting education with life, particularly productivity, have to be identified and solutions worked out which take care of the specific needs of the country. It is our firm view that while a careful study of major educational developments in other countries is

essential to enable us to draw upon their experiences, there is no substitute for original, hard and serious thinking involved in a sustained and serious effort to make our meagre resources go the longest way possible.

A CRITICAL REVIEW OF THE FIRST THREE PLANS

(a) Expansion of Education in India during the Plans.

			1950- 51	1955- 56	1960- 61	1965- 66	1968- 69	1973- 74 (target)
1	2	3	4	5	6	7	8	9
I. Enrolments in classes I-IV (Age-Group 6-11) (in millions)		Boys	13·8 (59·8)	17·5 (70·3)	23·6 (82·6)	32·2 (96·3)	34·9 (95·2)	41·3 (99·6)
		Girls	5·4 (24·6)	7·6 (32·4)	11·4 (41·4)	18·3 (56·5)	20·6 (58·5)	27·3 (71·1)
		Total	19·2 (42·6)	25·1 (52·9)	35·0 (62·4)	50·5 (76·7)	55·5 (77·3)	68·6 (85·3)
II. Enrolment in classes VI-VIII (Age group 11-14) (in millions)		Boys	2·6 (20·7)	3·4 (25·5)	5·1 (33·2)	7·7 (44·2)	8·8 (45·4)	12·2 (54·3)
		Girls	0·5 (4·5)	0·9 (6·9)	1·6 (11·3)	2·8 (17·0)	3·5 (18·8)	5·9 (27·7)
		Total	3·1 (12·7)	4·3 (16·5)	6·7 (22·25)	10·5 (30·9)	12·3 (32·3)	18·1 (41·3)
III. Enrolment in classes IX-XI (Age-Group 14-17) (in millions)		Boys	1·02 (8·7)	1·58 (12·8)	2·47 (17·5)	4·08 (25·6)	4·95 (28·5)	7·00 (34·3)
		Girls	0·20 (1·8)	0·30 (2·6)	0·56 (4·3)	1·20 (7·9)	1·63 (9·8)	2·69 (13·7)
		Total	1·22 (5·3)	1·88 (7·8)	3·33 (11·1)	5·28 (17·0)	6·58 (19·3)	9·69 (24·2)
IV. Enrolment at the University stage (Age-group 18-23) (in thousands)		Total	360 (0·9)	634 (1·2)	740 (1·5)	1,240 (2·3)	1,690 (2·9)	2,660 (3·8)
V. Total Educational Expenditure		Rs.	1,144	1,897	3,444	6,000	8,500	12,500
			(in millions)					
	Percentage of National income at current prices		1·2	1·9	2·4	2·9	2·9	3·1

N.B. In items I to IV, the figures in Parenthesis show the percentage of enrolment to the population in the age-group.

Prof. S. N. Mukerji observes, "There is no parallel to this expansion in the earlier history of this country, and even in the contemporary world, this record would be equalled by few countries if at all."

(b) **Qualitative Improvement Programmes.** Special programmes are (i) Improvement in the teaching of science, (ii) curricula reforms (iii) Improvement in teaching material, (iv) Reform in the evaluation system, and (v) Experiments with new methods, techniques and procedures.

(c) **Attempts Made Towards Equalisation of Opportunities.** Attempts have been made towards providing equalisation of educational opportunities. Mention may be made of the following programmes—(i) Free education at the primary level in all the States; (ii) Free education at the secondary stage in some States; (iii) Scholarship to meritorious student; (iv) Interests-free loans; (v) school meals; (vi) Transport facilities at some places; (vii) Free text-books on a limited scale; (viii) School uniforms at cheap rates; (ix) Special scholarships and grants to the under-privileged groups like the scheduled castes, the scheduled tribes; (x) Special incentives towards women education; and (xi) Facilities for the education of the handicapped children.

Defects In Our Planning

1. **Qualitative Improvement of Education received Low Priority.** Shri J. P. Naik observes in 'Education in the Fourth Plan,' "In all the three Five-Year Plans, programmes of qualitative improvement received a low order of priority and a small allocation of funds. If the determination of proper priorities is the essence of educational planning, this comparative neglect of quality should be regarded as a major weakness. What is even worse, the fundamental difference between the planning of expansion, and that of qualitative improvement was largely ignored by our educational planners."

He further observes, "We have been able to achieve, by and large, what have been achieved by expenditure of money. But where such expenditure of public funds had to be supplemented by expenditure of thought or by human effort, we have not been able to rise to the occasion and the results have been rather indifferent." Again he stresses this point "I consider this weakness—the expenditure—orientation of our plans—to be fundamental. If it is remedied, we shall get a much better return, not only for the additional funds, we invest in education, but also for the high level of investment which has already been reached." At the primary stage, we have failed miserably in reducing wastage and stagnation.

At the secondary and university stage we have not succeeded in restricting enrolments. We have failed in adult literacy programmes.

2. **Top Heaviness of Our Planning.** The second major weakness of our planning system is top-heaviness. Planning starts at the top

in Delhi and starts to descend downwards. Average teacher and inspecting officer has very little to do with educational planning. The educational planning process takes place in the class-room and hence the core of any educational plan should be the plans prepared by each educational institution.

3. Over-Dependence on Foreign Expertise. Our educational planning has been an over-dependence on foreign expertise for ideas and programmes and to some extent even for financial support. The results of dependence have been disastrous.

4. Educational Planning not linked with Economic Planning. It is universally admitted that educational planning in India has not been linked with economic planning. Our planners have not paid adequate attention to manpower needs.

5. Too Much emphasis on University Degree. We have always considered it essential to fill up high level manpower posts with university graduates and consequently we have ignored the planning of non-formal education.

6. Lack of Priorities. Shri J. P. Naik observes that almost every programme in education has some god-father or what is often worse, some god-mother. They have a genius for espousing forlorn causes so that the distraught education ministries are forced to adopt the comprehensive approach to please all."

7. Lack of National Policy on Education. Till 1968 the country did not have any national policy on education.

8. Lack of Resources. Shri S. N. Mukerji describes this situation as "our plans look forward to the monsoons for their sustenance and growth. Unfavourable weather at times results in drastic cuts in the plan allocations and the greatest economy is made in the educational budget. This reminds one of poor Oliver Turists who was always asking for more and was almost always refused."

9. Lack of Perspective Planning. Shri J. P. Naik has rightly observed, "unfortunately educational Planning in the Post-independence period has neither has a clear vision nor a definite direction and forms one of the weakest section in national planning." Practically all the three plans did not look beyond five years.

10. Absence of Adequate Research. Our attempts in the field of education research have been sporadic.

11. Too Little Balance between General and Vocational Education. Prof. V. K. R. V. Rao has observed, "There has been too little emphasis on a real balance between the provision of general and vocational education. While there has been some diversification of education it has not made much impact on manpower needs nor is, it geared to our development programme. To add to all this, wastage

and stagnation is found all along the line in our educational system."

12. Regional Imbalances. The expansion of educational facilities has not been uniform in the whole country. There are regional imbalances in regard to both the overall expansion and the various sectors of education.

Recommendations of the Kothari Commission for Effective Educational Planning

The Basic Problems. The crux of the problem of educational planning in India is to evolve a national policy in education in spite of the fact that education is largely a State subject in the Constitution and that a multiplicity of authorities at different levels make decisions on all aspects of the situation. This is not an easy task and as there is little similar experience to guide us, we will have to evolve our own techniques in most cases. It is also necessary to review and improve our planning techniques.

Some Suggestions for Reform. A review of the first three Five-Year Plans in the different States and the national level highlights the need to improve the planning techniques in some directions. These have been indicated below.

1. Emphasis on Qualitative Improvement. There has been an over-emphasis on achievement of targets in enrolments and expenditure. It is true that expansion will have to continue. But an over-emphasis on this aspect leads to the neglect of the still more important aspect of quality. Similarly an over-emphasis on expenditure targets tends to distort priorities and often leads to wastage. There is thus a need to take a more comprehensive view of the problem and to evolve a broader pattern of goals, especially those relating to qualitative improvement.

2. The Need for Concentration of Effort and Adoption of a Selective Approach. Throughout the first three plans, the general policy has been to do something in every sector or for every programme with the result that the meagre resources available were spread thinly over a very large area. This policy involves considerable wastage. It has, therefore, now become important to concentrate on a few crucial programmes, such as improvement of the quality of teachers, development of agricultural education, provision of good and effective primary education for all children, liquidation of illiteracy, vocationalisation of secondary education, establishment of major universities, expansion and improvement of post-graduate education, increase in the number of scholarships and the development of about ten per cent of institutions at each stage to optimum levels of quality.

3. Emphasis on Programmes which Need Talent and Hard Work. The emphasis on reaching expenditure targets to which a

reference has been made tends to place a premium on programmes where it is easy to incur expenditure, e.g., construction of buildings or expansion of enrolments. This is unfortunate because there are a number of programmes which call for determined effort, organisation, talent and hard work rather than large financial investment. The following are some examples of such programmes :

- production of literature in the modern Indian languages needed for their adoption as media of education at the university stage ;
- educational research ;
- examination reform ;
- preparation of school text-books and teaching and learning materials ;
- in-service education of teachers and officers of the Education Departments ;
- improving techniques of supervision ;
- improving contact with the local communities and parents ;
- providing enrichment programmes and guidance to gifted students and some special assistance to retarded or backward ones.

A number of instances of this type can be cited. What is important to note is that, in the existing situation where the financial resources are limited, it is programmes of this type that need far greater emphasis than those which need heavy financial investment.

4. Adequate Education and Research. Yet another weakness in our planning is the inadequacy of evaluation and research. Since planning is comparatively new process and we have to evolve our own techniques, it is necessary to evaluate our programme which will enable us to cut down costs and increase the effectiveness of the investment in education. But, by and large, this has not been done. Some attempts at such evaluation have been made recently in the planning Commission, viz., the COPP Teams have studied these problems, two of which were not of a major magnitude. What we would recommend is the deep involvement of universities, professional organisations, training colleges, etc., in a periodical evaluation of all major programmes included in the plans and in the development of a large-scale research programmes.

5. Proper Machinery for Overcoming Weakness of Existing Machinery for Educational Planning. The existing machinery for educational planning leaves much to be desired. It is not adequately staffed nor is the personnel engaged in it suitably trained. There is hardly any educational planning done at the district level. The training cells in the offices of the Directors of Education are inadequate and staffed mostly by persons who have had no training in the field.

Their work also is mostly administrative and financial and confined to the compilation and reporting of educational and financial statistics.

There is need to improve the organisation and methods of educational planning and for training competent personnel to staff the planning units in the Central Ministry of Education, the State Departments of Education and District School Boards. It should be possible for the Ministry of Education, in collaboration with the Asian Institute of Educational Planning, to undertake studies of educational planning in the different States and to conduct intensive courses for training the personnel involved in the process of educational planning in India. The subject is of such great significance that the UGC should also consider the possibility of setting up an Advanced Centre for Studies in Educational Planning, Administration and Finance.

6. Different Levels of Priorities. Education is essentially a responsibility of the State Governments. But it is also a national concern and in certain major sectors, decisions have to be taken at the national level. This implies the need to regard education as a Centre-State partnership. On the other hand, it is necessary to remember that education which concerns every parent and every family has to be taken as close to the people as possible and that its administration can be best conducted by or in close association with local communities. This implies that educational planning has to be decentralised to the district level and still further down to the level of each institution. The process of educational planning in a federal democracy like ours has thus to be the right blend of centralisation, in the appropriate sectors, with a large amount of decentralisation in other sectors and especially in administration. Care should, however, be taken that the parts fall coherently into the totality of a broad national plan, and all discordant features and contradictions are eliminated. For this purpose, it will be necessary to devise an effective machinery of co-ordination. This is the direction in which administration has to strive and planning has to grow.

Institutional Planning

What is Institutional Planning. Prof. M. B. Buch observed at the National Seminar on Institutional Planning held at Bhopal in November 1968, that an institutional plan is "a programme of development and improvement prepared by an educational institution on the basis of its felt needs and the resources available or likely to be available with a view to improving the school programme and school practices, constitutes a plan for an institution. It is based on the principle of optimum utilisation of the resources available in the school and the community. The plan may be for a longer duration or a shorter duration."

Need for Institutional Planning

The Education Commission has observed "No comprehensive

programme of educational development can ever put across unless it involves every educational institution and *all* the human factors connected with it—its teachers, students and the local community—and unless it provides the necessary inducements to make them put in their best efforts. For various reasons, this involvement does not take place and the motivation is not created at present. The main objective of this programme is to create these factors which has a large share in determining standards."

Objectives of Institutional Planning

- (1) Improvement of institution ;
- (2) Improvement of library equipment and facilities in school ;
- (3) Optimum utilisation of existing resources ;
- (4) Harnessing community resources and goodwill to improve and develop the school ;
- (5) Providing an opportunity to the local community, school staff and students to join hands and improve the school ;
- (6) Developing co-curricular programmes in the school like work experience, social service and adult educational programmes, and youth services which will make the school a community centre : and
- (7) Imparting realism and concreteness to educational planning.

The Scope of Institutional Planning

In the words of J. P. Naik, the scope of institutional planning may, perhaps, be spelt out as follows :

(1) Improving the School Plant

- (a) Provision of more amenities to pupils—drinking water, sanitary facilities, transport, mid-day meals, uniforms, medical aid, book banks, etc.
- (b) More and better equipment in the schools—library, reading rooms, laboratory, teaching aids, radio sets, etc.
- (c) Maintenance of school buildings—voluntary labour, contributions etc.
- (d) Providing more places in the school.

(2) Improvement of Instruction

- (a) Supervised study and special tuition facilities.
- (b) Visiting teachers from the teaching fraternity as well as from outside.

- (c) Support to teacher improvement programmes like in-service training, refresher courses, summer schools.

(3) Extra-Curricular Activities for Pupils

- (a) Social service projects.
- (b) Work experience through participation in community projects.
- (c) Athletics and games.
- (d) Literary activities.

(4) Community Programmes for the Schools

- (a) Literacy programmes.
- (b) Adult education programmes.
- (c) Youth service activities.

Characteristics of an Institutional Plan

- (1) The plan is prepared on the needs of the school as identified by the school staff.
- (2) It is based on the principle of optimum utilisation of the resources available within the school and the community.
- (3) It is a cooperative venture of the community, management, school staff and students.
- (4) It is goal-oriented.
- (5) It is specific for an institution. There cannot be a plan for all the institutions.
- (6) It aims at school improvement as well as school development.
- (7) It is continuously developing. An institutional plan cannot be rigid *i.e.* impervious to changes.
- (8) It forms the basis of the District plan for educational development and improvement.
- (9) It results into establishment of democratic procedures within the school.
- (10) An important outcome of institutional planning is the establishment of a better rapport with the community.
- (11) It results into improvement in motivation on the part of teachers, students, community and the management.

Institutional planning and the programme of school improvement cannot be looked in isolation. School improvement is the goal, institutional planning is a means to achieve the goal. Institutional planning implies the school staff meeting together, thinking about the state of affairs in the school, identifying the problems which may be individual or common, planning a programme of improvement over a

short-term as well as long-term period. The institutional plan, in fact, will be a blueprint for a school for its development as well as improvement.

How to Prepare a School Plan

The major steps in preparing a plan of improvement and development for a school are :

- (i) Undertaking a survey of the needs of the school ;
- (ii) Undertaking a survey of the resources available in the school as well as community.
- (iii) Preparing plans of improvement programmes ; and
- (iv) Planning the evaluation of improvement programmes.

The School Principal and the Institutional Plan

The first job of the principal will be to look at the whole school system, assess the strengths and weaknesses of its staff members and carefully create the feeling of readiness for change.

The First Step might be series of individual conferences with the staff followed by group conferences.

The Second Step will be the discussion about the need survey.

The Third Step will be survey of resources available in the school and the community.

The Fourth Step will be preparation of improvement programmes.

The Fifth Step will be to evolve methods, techniques and procedures for the evaluation of the programmes after they have been implemented.

The principal should realise that all teachers are not of the same calibre. He should also realise that all improvement projects are not of the same degree of simplicity or complexity. He should not insist upon or expect the same level of development for different projects.

At the initial stage or during the course of planning and implementing the programme, there will be opposition by teachers. This happens everywhere, where a planned effort to bring about change is made. The uncritical acceptance of a programme by the school teachers should be looked upon with suspicion rather than as an evidence of acceptance. In schools which have an authoritarian type of administration over a period of years, uncritical acceptance is very common. But this does not result in the development of programmes. Justified criticism of the programmes should not be looked upon as reluctance to change. Enlightened criticism and openness to conviction are the better signs of progress for change.

A Challenge and an Opportunity

J. P. Naik has observed, "The programme of institutional planning is both a challenge and an opportunity.

"It is a challenge because of the several intricate and complex problems for which practical and realistic solutions will have to be found. It also requires that all the persons concerned—officers of the department, headmasters, parents and students—should be properly enthused. This is, by no means, an easy task.

"The programme is also an opportunity. It is probably the principal tool which will help us to improve education in the present situation when financial resources are so scarce and the need to improve education is so urgent."

EDUCATION IN THE FIFTH FIVE YEAR-PLAN (1974-1979)

(Based on a Paper prepared for the consideration of the Central Advisory Board of Education after its meeting in September 1972)

Education—a Threefold Process. The Paper observed "Education is essentially a threefold process. It imparts information, teaches skills and inculcates values. Our present system is almost wholly geared to the first, a little to the second and only marginally to the third. The need to transform the educational system so that the teaching of skills and inculcation of values get their due emphasis is obvious, it alone can make education a powerful tool for social change and the realisation of our national objectives.

Six Objectives of Transforming the Educational System

- (1) Cultivating the basic values of humanism, democracy socialism and secularism ;
- (2) Inculcating a love of motherland, and a proper pride in our cultural heritage and achievements ;
- (3) Strengthening national integration which implies the development of proper non-communal attitudes, the subordination of all narrower loyalties, the supreme loyalty to the nation, and, in a plural society like ours, the development of capability for tolerating differences and a readiness to collaborate with others in pursuit of shared goals ;
- (4) Accelerating the process of modernisation and the development of a scientific temper and outlook ;
- (5) Promoting productivity through the teaching of technical and technological skills, inculcation of the dignity of manual labour, willingness to work hard, cost-consciousness and entrepreneurship ; and

- (6) Bringing the elite and the masses closer together so that the former retain their roots deep in all sectors of society and become committed to the service of the people.

12. Main Ingredients of the Programme

- (1) Transformation of the educational system.
- (2) Improvement of standards.
- (3) Initiation of a comprehensive programme of pre-school development meant specially for the under-privileged social groups.
- (4) Provision of universal primary education in the age-group 6-11 by 1975-76 and in the age-group 6-14 by 1980-81.
- (5) The adoption of the uniform pattern of school and college classes, *viz.*, 10+2+3, in all States and Union Territories.
- (6) Vocationalisation of education at the higher secondary stage.
- (7) The development of a national scholarship policy so that the talented students, and especially those coming from the most deprived sections of the community, are assisted to receive the best school and university education.
- (8) The launching of a youth movement for the population in the age-group 14-25.
- (9) Reorganisation of collegiate and university education.
- (10) Development of technical education.
- (11) Introduction of a large-scale programme of National social service ; and
- (12) Strengthening of the administrative machinery to plan and implement this significant programme of expansion and qualitative improvement.

Transformation of the Educational System

This implies :

- (a) Improvement of the curricula by :
 - (i) Introducing Work Experience in classes.
 - (ii) Teaching of compulsory trades or crafts in classes IX and X.
 - (iii) Teaching of science in classes I-X.
 - (iv) Inculcation of values.
- (b) New Methods. Introduction of new and dynamic methods of teaching which awaken curiosity, encourage self-study habits and promote problem solving skills.

(c) **Evaluation.** Evaluation up to class X by the schools themselves and the introduction of the first public examination at the end of class XII.

(d) **Text-Books.** Improvement of text-books, provision of free supply of text-books and educational materials for all needy students of the primary and middle school stages, establishment of adequate text-book literature.

(e) **Teachers Involvement and Upgrading of Professional Skills.** Strengthening of programmes for pre-service and in-service education of teachers which will include the establishment of National Council of Teacher Education at the Centre, Boards of Teacher Education in the States.

(f) **Strengthening of Institutional Structure.** Developing the programme which include UGC, NCERT and the National Staff College for Educational Planners and Administrators, etc.

II. Improvement of Standards. This comprises :

- (i) **Model Schools.** Establishing a model comprehensive secondary school in each district and a model primary school in each community development block.
- (ii) **Improvement of Selected Schools.** Raising about 10% of the schools to optimum levels so as to function as demonstration centres as well as extension service centres in the neighbourhood.
- (iii) **Improvement of Other Schools.** Improving these schools partly through local support and partly through States assistance and guidance.
- (iv) **Autonomous Colleges.** Functioning of autonomous, colleges as 'pace-setting institutions' and upgrading 10% of the colleges to optimum levels on the basis of adequate enrolments, staff and facilities.

III. Pre-School Education. The total number of children who benefit from the different programmes of pre-school education (*i.e* education, health, nutrition and welfare) should be raised to 10% of the population of the age-group 3-6 by 1980-81 as against about 1% that receives benefits at present. The programme of pre-school development for the under-privileged should be initiated.

IV. Universal Primary Education. Education for age-group 6-11 should be provided by 1975-76 and for those in the age-group 11-14 by 1980-81.

V. Educational Structure. A uniform pattern of school and college classes *viz.* 10+2+3 in all States and union Territories should be adopted and multiple entry made possible at 6+, 11+ and 14+

VI. Vocationalisation of Education. At the higher secondary stage our objective should be to divert about 50% of the students into suitable vocational courses.

VII. Scholarships. This includes the development of a national scholarship policy so that the talented students and especially those coming from the most deprived sections of the community are assisted to receive the best school and university education.

VIII. Reorganisation of Higher Education. This includes :

- (i) The adoption of the new pattern of 10+2+3.
- (ii) Provision of greater access to students from the under-privileged social groups.
- (iii) Expansion of facilities for part-time education or self study.
- (iv) Improvement of colleges.
- (v) At least 5% of the colleges to be made autonomous.
- (vi) 10% of the colleges to be selected for intensive development.
- (vii) Organisation of about 4,000 summer schools.
- (viii) Establishment of four Science Service Centres.
- (ix) Establishment of four large National Library Centres.

IX. Youth Movement

- (i) Provision for one Nehru Youth Centre in each district.
- (ii) Training of Youth leaders.

X. Adult Literacy : This includes:

- (i) Effective provision of universal primary education for all children in the age-group 6-14.
- (ii) Provision of part-time education.
- (iii) Development of youth movement in the age-group 15-29.
- (iv) Development programmes relating to agricultural improvement, etc.

XI. Introduction of a Programme of National Social Service

This includes the development of a programme of games and sports and cultural and social service activities.

XII. Strengthening of Administration. Steps will be taken to strengthen the administrative machinery suitably, both at the Centre and in the States. In the States the main points of emphasis would be to strengthen the machinery at the district level and to provide for adequate delegation of authority. At the Central level the National Staff College for Educational Planners and Administrators will be developed.

Financial Implications (Rs. 3200 Crores)*(Rs. in crores)*

1. Pre-School Development		
(Total cost estimated Rs. 100 crores. Of this Rs. 75 crores will be in the Social Welfare Department.		25
2. Primary and Middle School Education		1575
(A) Expansion		
(i) Salaries and allowances of teachers and contingent expenditure.		825
(ii) Buildings.		100
(iii) Equipment (excluding that for science and work experience).		20
(iv) Mid-day meals.		120
(v) Free Supply of text-books and stationery.		88
(vi) Grant of clothing, attendance allowance etc.		37
		1190
<i>Less savings on account of the National Volunteer Service.</i>		200
(This excludes Rs. 60 crores provided in the social welfare plan)		990
(B) Improvement		
(i) Work experience.		170
(ii) Science education.		29
(iii) In-service education of teachers.		66
(iv) Establishment of training institutions.		11
(v) Strengthening of existing teacher-training institutions.		20
(vi) Model primary schools.		175
(vii) Improvement of selected schools.		60
(viii) General improvement of schools.		54
		585
3. Secondary Education		
(i) Expansion of facilities.		200
(ii) Model comprehensive secondary schools in each district.		64
(iii) Improvement of selected 10% schools.		20

(iv) Improvement of other schools.	22
(v) Provision of text-book libraries.	15
(vi) Science education.	30
(vii) Training of teachers.	28
(viii) Other programmes.	21
	—
	400
	—
4. Vocationalisation of Secondary Education (exclusive of provision in other Ministries).	100
5. Adoption of Uniform Pattern of 10+2+3	100
6. Higher Education.	
(i) Programme of expansion.	100
(ii) University development.	100
(iii) Centres of Advanced Study.	20
(iv) Research.	30
(v) Student amenities (including text-books libraries, academic centres and hostel facilities).	50
(vi) Improvement of colleges.	60
(vii) Summer Institutes.	20
(viii) Science Service Centres.	10
(ix) National Library Centres.	10
	—
	400
	—
7 Technical Education	200
8. Other Programmes	
(i) Scholarships (Exclusive of the provision in the Department of Social Welfare).	207
(ii) Youth Services.	50
(iii) Adult Literacy.	10
(iv) Language Department.	50
(v) Games and Sports.	10
(vi) Cultural Programmes.	20
(vii) Text-book Presses.	20
(viii) Administration.	33
	—
	400
	—
Grand Total	Rs. 3.200 crores

New Pattern of Education

Introduction of the New Pattern. On the recommendations of the Education Commission 1964-66 and in accordance with the Resolution on National Policy on Education (1968), the Central Advisory Board Adopted a resolution in its meeting held in November 1974 recommending the introduction of the 10+2+3 pattern of education all over the country during the Fifth Plan Period. The Resolution followed wide spread consultation with several bodies and other concerned agencies throughout the country. By 1977, this pattern had been introduced in the following 19 States/Union Territories :

(1) Assam, (2) Andhra Pradesh, (3) Gujarat, (4) Jammu and Kashmir, (5) Karnataka, (6) Kerala, (7) Maharashtra, (8) Sikkim, (9) Tamil Nadu, (10) Tripura, (11) West Bengal, (12) Andaman and Nicobar Islands, (13) Arunachal Pradesh, (14) Chandigarh, (15) Dadar and Nagar Haveli, (16) Delhi, (17) Goa, Daman and Diu, (18) Lakshadweep and (19) Pondicherry.

SALIENT FEATURES OF THE PATTERN

The new pattern has the following salient features :—

1. **Ten-Year Common Course.** The pattern envisages a common course of general education for all students at this stage. There is an undifferentiated course of general education for all without any diversification of courses. The main emphasis has been on providing a wide spectrum of knowledge relevant to life and to develop different aspects of personality especially at the secondary stage comprising classes IX and X. Courses at this stage include the following subjects :—

(i) Science, (ii) Mathematics, (iii) Languages, (iv) Social Studies including History, Civics, Geography, Economics and Commerce, (v) Two Languages, (vi) Work Experience, (vii) Health and Physical Education and (viii) Additional Language—Optional.

2. Higher Secondary Education. (Classes XI and XII). A broad based general education at the secondary stage to be followed by two years of diversified and vocational education which will have 2 types of courses i.e., Academic and Vocational.

It was visualized by the Education Commission (1964-66) that at the end of the ten years of school education, a proportion of students would step off the school system and enter working life (about 40 per cent); some more would step off the stream of general education and enter vocational courses whose duration would be one to three years (about 30 per cent); and the remaining would continue further in the stream of general education whose duration will be one, and ultimately two years (about 30 years).

Main Characteristics of the New Pattern

1. It envisages 10 years of schooling with common and undifferentiated courses in classes IX and X.
2. It provides for 12 years of Higher Secondary Education in place of the 11 years, the usual school pattern.
3. The first degree course to be of three years after 12 years of schooling.
4. The first degree to be attainable after 15 years of education.
5. It provides for the compulsory teaching of science, mathematics, social studies, two languages, work experience health and physical education.
6. It provides for Various vocational courses in classes XI and XII.
7. It provides for two levels of courses in some subjects.
8. It provides for specialization after 10 years of schooling.
9. It provides for a core course in classes XI and XII.

Chief Merits of the Pattern—Revolutionary Implications

The new pattern has a lot of merit, promise and potential. The thrust of the new pattern is an honest attempt not only to improve the standard of education but also to make it employment-oriented. It has been observed by many educators that never before, either in the past or during the contemporary period, there has been a more relevant and realistic step in the field of education than the introduction of the $10+2+3$ pattern. The new pattern, it is claimed, also fits admirably into two fundamental objectives—national integration and social purpose.

Broadly speaking, following are the chief merits of the new pattern :

1. Educational System Related to Production. By providing useful work experiences and vocational courses, the new pattern

aims at linking education with productivity. These courses, it is hoped would help the students become better employable and self-productive.

2. Strengthening National Unity. A uniform pattern of education in all parts of the country is expected to generate a feeling of oneness among the students.

3. Education for Employment. The new pattern will enable students in preparing for entry in the employment market for completing the higher secondary education.

4. Specialisation at the Appropriate Age. There is a general feeling that streaming of pupils into specialised groups from class IX is undesirable. The new pattern will provide reasonable opportunities at the appropriate time to the students to take decisions about the particular stream to be taken up by them in class XI. It is felt that the students at plus 14 are not as mature as students at plus 15 to take such vital decisions which ultimately affect their entire career.

5. Implementation of the National Programme of School Improvement. The new uniform system of education is likely to facilitate the implementation of new programmes like the production of suitable text books and teaching materials, reform in evaluation and training of teachers.

6. Interstate Adjustments. A uniform structure of education will help the mobile population which is gradually increasing in the country.

7. Mature Students. Two important factors namely the introduction of general education in classes IX and X and the increase in the duration of higher secondary education from 11 to 12 years will make students more mature and knowledgeable.

8. Upgrading the First Degree. It is generally observed that no advanced country in the world honours a young man with the award of a first degree in less than 15 years of preparation and hard work. It is because of this reason that graduates from India are not considered at par with graduates in many countries of the world.

9. Higher Standard of Education. The new pattern will put some check on the indiscriminate rush to universities and only deserving students will be going for higher education. Extension in one year will also add to the general knowledge and mental make up of the students.

Limitations and Demerits. A Fraud—A Fallacy and A Fad.

The new pattern of education is not without critics. They argue that the new pattern was introduced in name only. Necessary

equipment, apparatus and other materials were not provided with the result that the introduction of science and work experience could not make any impact.

It is also argued that it is a fallacy to assume that by adding our year we can turn out students who are more mature and knowledgeable.

According to some critics it is a fad with some educationists that science and mathematics must be made compulsory subjects to develop the power of understanding of the students. Similarly it is a fad with them to plead for work experience. Such advocates forget that by making all subjects compulsory at secondary stage we are going against one of the fundamental and vital principles of education that it should be in accordance with 3 A's i.e., Age, Ability and Aptitude. A uniform prescription can hardly serve the purpose.

Following limitations and demerits of the new structure may be pointed out :—

1. Contents of the curriculum are very heavy. The scheme of 14 subjects for the students of 14 years of age seems to be burdensome.

2. It fails to provide for separate courses for students of varying abilities and interests.

3. Adequate steps for linking 'work experience' and vocational subjects with the requirements of trade, industry, commerce, agriculture etc. have not been taken.

4. In numerous cases laboratories, workshops and libraries have not been provided to meet the new requirements.

5. Adequate provision was not made for training teachers to meet the new challenge.

6. Subjects like Commerce, Sanskrit, fine arts, drawing and painting have been neglected in the new pattern.

7. Modern Mathematics has been made compulsory to the students and this has not been liked by a large section of the population of this age group.

8. By adding one year to school education, it envisages more financial burden on the parents.

9. Since the new pattern does not provide for any failure, there is every danger that the teachers and the students may not put in very sincere efforts.

10. From the specialisation point of view 10+2 would be inferior to the previous 8+3. For example a student used to study commerce for about 24 periods in class IX, X and XI and now he would study this subject for about 18 periods in four years i.e., classes IX, X, XI and XII. It may be recalled that only 2 periods

are provided for this subject in the new pattern. By and large, the position will be the same for other subjects like history, economics, physics, chemistry and biology etc.

11. The new pattern created many administrative problems. Teachers in some subjects became surplus and in other subjects, their shortage was felt. A large number of transfers of teachers was the obvious result which was marked by frustration and political interference also.

12. It put heavy financial burden on the exchequer of the Central and State Governments.

13. The number of students taking vocational courses is far below our expectations. This indicates that the scheme has not been successful in serving one of the important objectives of educational reform in the country.

Ishwar Bhai Patel Review Committee(1977)

Appointment of the Committee. Dr. P.C. Chunder, Union Minister of Education and Social Welfare, in his capacity as President of NCERT felt that an objective assessment of the existing syllabuses and textbooks should be made and therefore, in June 1977, he appointed a Review Committee under the Chairmanship of Shri Ishwarbhai J Patel, Vice-Chancellor Gujarat University. The Committee consisting of 30 members included representatives of the Central Board of Secondary Education, State Boards of Secondary Education/State Governments, Teachers' Association, Parent-Teacher Associations, educationists, practising teachers and members of NCERT.

The Committee submitted its report in November 1977.

Need for a Review Committee. The recommendations of the Education Commission (1964-66) were considered by the Government of India and a resolution was adopted on the National Policy on Education in 1968. The Ministry of Education and Social Welfare appointed an expert group in 1973 to develop curriculum for the 10+2 pattern. The group drafted an Approach Paper in 1975 which was circulated for opinion of the State Governments and of teachers, planners and educational administrators. This was followed by a publication in 1975 entitled "The Curriculum for the Ten-Year School—A Framework". In 1975, NCERT prepared syllabuses, textbooks and other material. The Central Board of Secondary Education adopted a large number of textbooks prepared by NCERT for classes IX and X for the first set of candidates appearing for the secondary public examination held by the Board, at the end of class X, in April 1977.

Criticism of the Books and Syllabuses. The syllabuses and textbooks prepared by NCERT, especially for classes IX and X evoked criticism from the public, teachers, parents and children.

The main criticisms were that the scheme of examination contained too many subjects for study, the textbooks were too many and too voluminous and therefore, there was no time for self-study and physical activities.

Another major criticism was that 'work experience', which was intended to be an integral feature of the curriculum, at all stages, did not find a proper place in the 'teaching-learning process' that followed the introduction of the new pattern, thus giving the impression that the curriculum and the syllabuses developed by NCERT would perpetuate the same old system of bookish education.

Terms of Reference of the Review Committee. The terms of reference of the Review Committee were :

"(1) to review the stagewise and subjectwise objectives identified in the NCERT document "The curriculum for the 10 year school".

(2) to scrutinise the NCERT syllabus and textbooks, in the light of the review as per (1) above.

(3) to scrutinise the scheme of studies, as given in the said document and examine whether any suitable modifications in either the scheme of studies or the time-table or both should not be made and to propose suitable staffing pattern.

(4) to review the present scheme of studies and the time allocated for various subjects with a view to ensure that :

(i) the institution/teacher has adequate time for experimentation, creative work, remedial instruction, etc.

(ii) to accommodate the needs of the bright child for advanced level courses ; the specific interests and aptitude or the lack of it, in children, in only certain subject areas, keeping in view the national goals of development and objectives of education."

TWENTY FOUR MAJOR RECOMMENDATIONS

1. Formal and Non-formal Arrangement for Education. The learning system should be organized through formal and non-formal arrangements—some institutional, some partly personal—and that the institutional arrangements should not be so rigid as to exclude those learners who wish to make use of them.

2. Flexibility of the Curriculum. Linked with such flexible arrangements within the learning system, the content of learning must also be flexible and arranged so as to suit the needs of individual learners of groups.

The curriculum too must be capable of catering to the requirements a wide range of learners and learning circumstances.

3. Minimal Core. The curriculum has to be built round local situations, though there must be a core of basic content for

comparability of education; attainment and the acquisition of further skills and knowledge. This core should be minimal.

4. Work Education. The principles of Basic education, as evolved by Mahatma Gandhi and accepted in the Kothari Commission Report with the stress on work education need to find a central place in the educational system.

5. Various Sources of Learning. The classroom is not the only place or source from which children learn. The environment and society are also sources from which children acquire attitudes and knowledge. Educational programmes must be so arranged that all these factors are fully utilized and hence rigid uniformity of educational programmes is neither desirable nor sound.

6. Socially Useful Productive Work. We also prefer the term 'Socially Useful Productive Work' to that of work Experience, as it is not only more expressive but it focusses attention on the practical aspect of this area of education.

7. Increased Allocation of Time. In order to implement Socially Useful Productive Work effectively the Review Committee has recommended more time. As against about 3 hours for middle and secondary classes recommended by the NCERT Framework, Review Committee recommends about 6 hours, i.e., the double time.

8. Educational Structure. The Committee has suggested the following :—

- (i) Primary Classes I—IV/V.
- (ii) Middle Classes IV/V to VII/VIII.
- (iii) Secondary Classes VIII/IX to X.

The scheme envisages flexibility in view of the different existing schemes in the States.

9. Less Institutional Hours. $2\frac{1}{2}$ to 3 hours of formal instruction is sufficient for classes I—IV/V.

10. No Rigid Time Table in Classes I—IV/V. At this stage a rigid distribution of time into class periods is educationally unsound.

11. Textbooks. Except in the case of language there is no need for textbooks in classes I—II, in classes III—IV/V there should be one textbook for languages, one book in Mathematics and one for Environmental Studies.

12. Teachers' Guide Books and Teaching Aids. Teachers' guide books and teaching aids are necessary and these should cover the whole range of activities for all classes and that in the preparation of guide books principle of correlation should be the basis.

13. Ban on Home Work in Classes I to IV/V. One of the most unethical educational practices, at present, is giving children unlimited home work. A child works four to five hours in school and is then faced with the prospect of two to three hours of home-work. Thus a child is a prisoner either in the four walls of the school or of his house for the greater part of the day. A majority of children, are, therefore, unable to take part in activities that make life joyful.

We are, therefore, constrained to condemn the practice of prescribing home work and we call for a complete ban on home work from Classes I to IV/V.

14. Self-Study. Arrangement for Self-Study will be more beneficial as it can be done under the supervision of teachers.

15. No Rigid Academic Year. The school session should be scheduled according to local needs in view of the fact that more than 80% of the primary schools are in rural areas.

16. Alternative Courses in Mathematics and Science. It is necessary that courses in these subjects should be so framed that they take into consideration the availability of teachers, the needs of children and in addition, in science, the extent of laboratory facilities and apparatus available. Therefore, alternative courses are recommended.

17. Alternatives and not Higher or Lower Courses. We would however, stress that the alternatives in Mathematics and Science must be considered alternatives and not higher or lower courses.

18. History, Civics and Geography. We are of the view that one area in which the present scheme is overloaded in 'Social Studies' or 'Social Science'.

The Committee, therefore, recommends the inclusion of courses in History, Civics and Geography and excludes subjects like Economics, Commerce and Psychology.

19. Syllabus Frames. We believe that there is an advantage in not giving detailed courses of studies as they will not be immediately operable. The advantage is that the Education Departments, Examining Boards and Schools will have an opportunity of studying the main topics and then decide the details of the content, in relation to their particular needs and in keeping with the facilities available.

20. Freedom to Develop Textbooks. We recommend that NCERT should concentrate on the production of instructional material and that State Government, Examination Boards, schools and other educational agencies must be given freedom to adapt and develop this material to suit their particular needs.

21. Multiple Entry. We wish to reiterate that opportunities through formal and non-formal educational arrangements must be made so that drop-outs are enabled to re-enter the stream of education without any difficulty at any stage.

22. Staffing Pattern. We do not propose to suggest any formula as the constraints of finance and availability of teachers are important variables which make the application of a single formula generally impracticable.

We suggest two principles : appraise the needs of each area separately and where the teaching conditions are most difficult, provide extra teachers and provide also the best available teachers.

23. Experimentation, Creative Work, Remedial Instruction. We feel that if teaching conditions are made even reasonably congenial, creative and experimental work will develop and thrive and individual attention and remedial work will follow.

24. Funds on Priority Basis. Funds must be found on a priority basis.

Observations on the Recommendations

1. A flexible curriculum can only be visualised if there were no prescribed/nationalised text-books for the entire State or the Union Territory. As the situation exists to-day, almost all the States and the Union Territories have nationalised almost all the text-books. It is therefore, not understood how flexibility could be introduced in the curriculum.

2. The Ishwar Bhai Committee has recommended the principles of Basic Education and the introduction of Socially Useful Productive Work. The crucial point is—Shall we do it ?

3. The Review Committee has not given clear cut stages of school education. It has referred to the Primary stage comprising classes I—IV/V, Middle classes IV/V to VII/VIII and Secondary classes VIII/IX and X. Here is an area in which uniformity could be brought about without involving significant finances.

4. The recommendation of having only $2\frac{1}{2}$ to 3 hours of formal instruction for classes I—IV/V can hardly be supported. We have very few voluntary agencies in the field of non-formal education which can cater to the educational needs of such a vast population of school going children. Thus by reducing the time of formal education, we would be leaving the children to the mercy of anti-social gangs.

5. It is very difficult to accept the view that there should be a ban on homework in classes I to IV/V. It is true that sometimes the load of homework is very heavy but this does not imply that

there should be a 'complete ban' on homework. Extreme positions should generally be avoided,

6. It is not clear how the proposed scheme of syllabus frames will be useful to schools if books are prescribed by Boards or Departments.

7. The Review Committee has not suggested any staffing pattern.

8. The Review Committee has completely ignored the calculation of funds needed for the implementation of its recommendations. It may be very pertinent to observe that schemes become 'Utopian' when they do consider financial aspects. As a matter of fact this aspect should have been discussed very thoroughly.

National Review Committee for the Plus 2 Curriculum (1978)

Appointment of the National Review Committee. "The National Review Committee on Higher Secondary Education with Special Reference to Vocationalisation" was appointed in October 1977 by the Union Education Minister, Dr. P.C. Chunder, in his capacity as President of the NCERT. Dr. Malcolm S. Adischaiah, Vice-Chancellor, University of Madras was nominated as the Chairman : The National Review Committee submitted its report on 28th Feb. 1978.

The Need for Review. There were three important reasons for the appointment of this National Review Committee :

1. The document 'Higher Secondary Education and its Vocationalization' published in September, 1976 by the N.C.E.R.T. contained many important and forward looking features such as flexibility in the choice of vocations, determining vocations with reference to distinct or a group of distincts, micro planning at the district level and assessment of manpower needs etc. which required rethinking.

2. The NCERT document needed to be reviewed in the light of the Report of the Ishwarbhai Patel Committee on the 10-year school curriculum. The consequence of the recommendations of the Ishwarbhai Patel Committee had to be reflected in the curriculum for classes XI and XII.

3. The National goals and priorities formulated for the country's development for the coming Sixth Plan had to be taken into account in this exercise relating to the higher secondary stage of education.

Terms of Reference. The terms of reference of the National Review Committee for the Plus Two Curriculum were as follows:

(i) To review the NCERT's document 'Higher Secondary Education and its Vocationalization' and to suggest modifications, if any.

(ii) To study the syllabi and the courses of the C.B.S.E. and a few State Boards with special reference to a few selected vocations and to recommend appropriate syllabi.

(iii) To recommend a plan of action for introduction of vocationalization at the secondary/higher secondary stage.

MAJOR RECOMMENDATIONS

1. Importance of Higher Secondary Stage. The National Committee considered three main points in this regard :

(a) *Terminal Stage.* This two-year stage is important because for about half of those entering it, it represents the terminal point of formal schooling. For this substantial group, the learning experience at this stage of education becomes important for their living and decisive for their living gainful lives.

(b) *Bridge between the School Education and Higher Education.* The higher secondary is ~~in~~ in relation to the school both a mirror and a reflector. On the other hand the foundations of higher learning are laid at this stage. In that sense the university and the college can only build on the material formed at the higher secondary stage.

(c) *A Transitional Period of Life.* This is the adolescent period of one's life when the personality and its components are growing, clashing, watching, imitating, demanding, giving, receiving and sharing. In view of this the higher secondary stage derives its uniqueness in human terms because it is dealing with the human person at a period of transition from childhood to youth, from infancy to teenage.

2. Objectives of Higher Secondary Education. The National Review Committee has stated the following objectives of this stage of education :—

- (i) Objective of International Understanding.
- (ii) Objective of Removal of Unemployment.
- (iii) Objective of Removal of Destitution.
- (iv) Objective of Rural Development.
- (v) Objective of Adult Literacy.

3. Two Broad Learning Components. They are :—

- (i) General Education Spectrum.
- (ii) Vocational Spectrum.

4. General Education Spectrum. This is the bridge facet of the plus 2 stage. This is also the phase of the educational systems in which there is a built-in-continuity with the past, the main innovation being learning acquired from Socially Useful Productive Work.

5. Pattern of the General Education Spectrum. This will be as under :—

Course	Time Distribution
(i) Language (s)	15%
(ii) Socially Useful Productive Work	15%
(iii) Electives (3 subjects)	70%

6. Socially Useful Productive Work. Socially Useful Productive Work, which is of a practical nature and undertaken under appropriate supervision and planning is likely to help achieve, inter alia, the following objectives :—

- (a) Inculcation of positive attitudes to work.
- (b) Identifying themselves with the community by rendering Social and Community Service.
- (c) Development of the habit of co-operative work.
- (d) Making the community conscious of scientific advancements and help it develop a scientific outlook.
- (e) Learning to apply one's classroom and vocationalised knowledge to solve day-to-day problems of the community.
- (f) Participation in nation building activities.
- (g) Realisation of the goals of the state and national development.

The project areas for Socially Useful Productive Work can be selected according to the convenience of each school, its location, rural or urban, its background and experiences

Socially useful productive work, should, as far as possible, be allied to the electives chosen by the students, allowing also for any other kind of work depending upon the facilities available in the neighbourhood. However, the following general programme can be undertaken by all the pupils irrespective of their subjects (electives of study) :—

- (a) Fact-finding.
- (b) Tree planting.
- (c) Cleanliness and Sanitation.
- (d) Deepening ponds, construction of contour-bounds, community halls, road laying.

- (e) Small Savings Drive.
- (f) Health and Nutrition education.
- (g) Celebration of National days and festivals.
- (h) Organising film shows.
- (i) Organising libraries/book banks and mobile laboratories.
- (j) Hospital work.
- (k) Conducting programmes in balwari (games and music).
- (l) Coaching children.
- (m) Adult literacy.
- (n) Camps in the adopted area.

7. The Vocationalised Course. The pattern of the course and the allocation of time of the vocationalised spectrum would be :—

Course	Time Allocation
(1) Language (s)	15 per cent
(2) General Foundation Course	15 „ „
(3) Elective subjects	70 „ „

8. General Foundation Course. The course is meant to be taught for 2 years, 4 to 5 hours per week. The objectives of the course are to enable the students to :

- (a) become aware of the need for rural development and self-employment.
- (b) understand the place of agriculture in the national economy.
- (c) develop skills and managerial objectives to run small-scale and cottage industries ; and
- (d) gain insight into the problems of unemployment, under-development and economic backwardness of India.

The course will comprise Part 'A' and Part 'B'. Part 'A' of the course is common to all vocations and Part B related to a particular vocation.

Part 'A' includes the following broad outlines :

- (i) Gandhian Concept of Education.
- (ii) Agriculture in the National Economy.
- (iii) Rural Development.
- (iv) Problems of Urban Slums.
- (v) Health, Hygiene and Sanitation.

Part 'B': Any one of the following topics :

- (1) Small Scale and Cottage Industries.
- (2) Entrepreneurship.
- (3) Cooperatives and Credit Facilities.
- (4) Marketing.
- (5) Sales Promotion.
- (6) Unemployment, Under-employment and Manpower Utilization in India.
- (7) Human Relations.
- (8) General Exposure to World Trends and Changes.
- (9) Environmental Protection and Development.

9. Vocational Electives. About 50 per cent of time allocated for these electives should be spent on practical work. Special attention has to be given to the self-employment factor.

10. Agriculture and Related Vocations. Education for farming and rural living is an important aspect of the total educational programme in India. Therefore, it is essential to provide a series of courses for the future farmers so that they can select vocational subjects according to their own choice and need, which will be useful in their practical life.

11. Flexible Streaming. There should be no rigid streaming of courses into the General Education and Vocationalized Education Spectrums. Each School should be allowed to offer such General Education and Vocationalised courses in accordance with the facilities available and the demands in the region.

12. Vocational Surveys. With regard to the offering of Vocationalised courses in rural or urban Schools, a Vocational survey of the area—metropolitan, block, district or state—be undertaken, such surveys being done, even in cases where the Vocational courses have been started.

13. Location of Schools. Location of Schools in the rural sector be given priority and they should be adequately equipped.

14. Use of Available Facilities. To economise on the financial investment on infrastructural facilities, spare capacity in the existing vocational institutions be used and the enrolment be increased through running double shifts wherever it is feasible and whenever further demands for technical skills and competencies arise in the neighbourhood, including where necessary new courses and strengthening the existing facilities.

15. Counselling and Placement. As vocationalisation is extended the Counselling and Placement Officers be appointed in clusters of 3 or 4 schools particularly in rural areas to start with.

16. Orientation of Teachers. Both pre-service and inservice teacher education should be so organised as to focus about the proposed changes at this stage of education.

There should not be insistence on post-graduate qualification in respect of teachers of Vocational courses. What is needed is means of developing the required skills and competencies for particular Vocations and for this services of persons who have actual experience on the job may be fruitfully utilised to teach vocational courses.

Part-time teachers may also be appointed, wherever necessary.

17. Modules in the Curriculum. The curriculum should be so structured that the courses lend themselves to imparting instruction in terms of well connected modules to enable the students to choose and continue them according to their needs.

18. Suitable Books. In order to impart instruction in vocational courses, in agricultural and related subjects books be written on a priority basis to suit local conditions and made available to schools.

19. Apprenticeship Training. Apprenticeship facilities should be extended to all the students who complete education in vocational streams if they desire to benefit from such training.

20. Recruitment Policy and Delinking of University Degree from the Job. The recruitment policy of the Government as well as public sector organisations should be revised and job requirements should replace the university degrees as essential qualifications. Vocationally qualified persons should be preferred to graduates, and entitled to the pay scales available to graduates as long as the jobs performed are the same or similar.

21. Popularising Vocational Courses. Following are some of the suggestions for attracting students towards vocational courses.

(i) The products of vocational schools should be given preference in admissions in Agriculture Colleges and Universities.

(ii) The certificate awarded by the Board at the end of class XII should be considered at par with the Agriculture diploma for instance given by the U.P. Government and other States.

(iii) Only certificate holders of these schools should be given license for starting Agricultural Services Clinic or Farmist shop (similar to the eligibility of diploma/degree holders of Pharmacy for the Chemist Shop). In these clinics they can provide plant protection services, hire, purchase and repairing services of agricultural implements, consultancy, seed and fertilizers and manures etc.

(iv) The products of these schools should be given preference in the allotment of agencies of the National Seeds Corporation and Fertilizers Corporation of India and other bodies.

(i) Banks and other financial agencies should grant loans to the products of those schools for self-employment.

(ii) They should be considered qualified for the post of Field Assistant, Laboratory Assistant and other equivalent posts.

(iii) Vocational teachers of agriculture may be given some extra remuneration besides their salary, because they have to work before or after school hours every day according to the needs of the farm.

(iv) The State Departments of education may encourage setting up of the farm boys and girls organizations, such as "Future Farmers of India". With the help of such organizations, agricultural leadership may develop among the students taking the vocational course in agriculture.

(v) A school having agriculture in IX and X classes may be given preference for opening the Agricultural Vocational courses at the +2 level.

(vi) Necessary inputs in terms of funds and other facilities may be provided to these schools by the State Government and the Union Government.

(vii) Wide publicity may be given through newspapers, radio, T.V. and other mass media regarding the scope and objectives of this vocational course. All parents who wish to get their wards admitted must be clear about the future prospects of this course.

22. Semester Pattern and Credit System. Those States where the universities have already adopted the semester system, the same may also be introduced in classes XI and XII. The other States may study the experiences of the States which have already introduced the Semester system and take suitable steps for the orientation of teachers and, preparation of modules of learning and textbooks for adopting the semester pattern, at a later and appropriate time.

23. Setting up the National Council of Vocational Education. Vocational courses call for a good degree of co-ordination, co-operation and evaluation by a national apex body. The Ministry of Education should set up the National Council of Vocational Education, for this purpose. At the state level, State Council for Vocational Education be created to perform similar functions under the general guidance of the National Council of Vocational Education.

24. Local Support. Agencies such as Panchayat Unions, Agricultural and Rural cooperatives, the Small Industries Corporation, Khadi and Village Industry Commission etc. help in identification of vocations and in training of pupils and teachers of Vocational Education.

26. Financial Resources. Any expenditure in Vocationalisation should be considered as a national investment and an investment for the future. It may at the same time be emphasised that no large scale or ambitious expenditure be incurred on equipment unless it is ascertained that it be needed for a long period and even so not in the area of manufacturing industrial or engineering skills which are left to existing Vocational technical education institutions.

27. Adequate Preparation. Probably more reforms and innovative educational plans have failed for lack of adequate preparation than for any inherent errors or defects in the plan. In our society where planning and programming have reached quite high and sophisticated levels the need for taking time and expanding equal effort on preparation for executing the plan is urgent and important.

DISTINCT MERITS OF THE RECOMMENDATIONS

1. Learning To Do. The report has been aptly entitled 'Learning to Do'—Towards a Learning and Working Society.' The scheme proposed by the National Review Committee (78) admirably fits into the economic and Social programme of the Govt. with its emphasis on agriculture and rural oriented Educational programmes. The +2 committee has recommended that location of schools in the rural sector be given priority.

2. Learning To be Based on Work. Mr. Malcolm S. Adisashiah, the Chairman of the Review Committee in his letter of 'transmittal' to the Minister of Education and Social Welfare has stated, "the Central Finding of the Committee is that Learning must be based on work: either through what the Ishwar Bhai Committee calls socially useful productive work which has been woven into the General Education Course, proposed in the report or through the Vocationalised courses that we have recommended."

3. General Education Course in Place of 'Academic Course'. The +2 Review Committee has very rightly used the term General Education and eschewed the term Academic Course because of its reverse connotations.

4. Vocational Courses to be Agricultural Oriented. The +2

Review Committee has given special attention to the fact that India is, by and large, a rural country and accordingly agriculture and rural-based vocational courses have been recommended. The Chairman has highlighted the importance of this aspect in these words :

"For the immediate future, i.e. for the 6th plan, the vocational course to be offered at the higher secondary level should be in agricultural and related rural occupational areas and in managerial, commercial, health and para-medical vocations, and not through opening vocational courses at this level in the manufacturing industrial and engineering occupations. Given the larger scale un-employment of the products of the I.T.I. and to a lesser extent of the polytechnics and Engineering colleges as set forth in official reports, these offerings at the +2 Stage are not needed. There was also the need for this stage of education to conform to the National priority to Agriculture, rural development and adult literacy that had been sadly neglected to-date by the formal school system. In fact, we recommend opening or locating of higher secondary schools in rural areas with vocational courses in agriculture and related occupations partly to make for this lacunae."

5. Flexibility. The recommendations of the +2 Review Committee provide for a flexible approach to the provision of various courses. It has been recognised that General Scheme must be applied with a certain amount of flexibility, allowing individual States and territories and even individual schools to adapt the courses and distribution of time to local conditions and pedagogic perceptions.

6. Need for Sufficient Preparation in Vocational Courses. Shri S. Adiseshiah, in his letter of transmittal has observed, "A final consideration that I would like to bring to your attention is our plea for careful preparation to ensure that the many facets of the reform of Higher Secondary Education are thought through, planned for and provided against as the country's stakes in this educational stage are high. One problem here is that almost all States as well as the central agencies have already launched on the plus 2 stage. Hence for most agencies the recommendations in this report will have to be used as guide-posts and lead points to review what has been embarked upon, and make such corrections and changes in the future as they may deem necessary and appropriate. In fact such a system of continuous evaluation should be built into our entire educational system, and for this stage should be undertaken by the Central and State Boards and the National and State Vocational Councils of Education that have been recommended. To err may be human, but to persist in it is inhuman."

7. Realistic Recruitment Policy. We fully endorse the

LIMITATIONS OF THE RECOMMENDATIONS OF THE REVIEW COMMITTEE:

1. 'Learning To Be' and not 'Learning To Do'. The very title of the report suggests a restrictive function of education. The title of the present report taken from the title of the International Report 'Learning To Be' suggests that the primary function of education is 'doing' and not making a man or a woman. In other words the title gives the impression that a man merely exists for bread and butter and he has very little regard for higher values of life. It is true that by laying emphasis on 'Doing' the report has highlighted the special need for vocationalisation. But the report tends to create the feeling that education is meant for the satisfaction of the needs of an 'Economic Man'.

2. Financial Implications of the Scheme. The National Review Committee like the earlier Ishwar Bhai Patel Committee has failed to work out the implications of the introduction of the vocational courses and the socially useful productive work in educational institutions. It is an irony of fate that our educational experts usually indulge in platitude talk and ignore financial matters with the result that our reports remain on paper. It must always be remembered that, however, an ideal a programme, it cannot be implemented without the provision of adequate funds. The proposed scheme envisages the establishment of forms/workshops in a large number of schools. It also requires enormous raw material and appliances and also the supply of suitable teachers for providing effective and appropriate training and guidance to the students. One fails to appreciate as to how these problems are to be solved. Generalised recommendations do not cut much ice.

3. Defective Method of Working of the +2 Review Committee. It appears that the +2 Review Committee based its recommendation on discussions carried on in closed doors. It has not based its recommendations on any scientific and adequate data. It has also not tried to assess the views of the students and their parents. Questionnaires on the various aspects of the vocationalisation of education should have been administered not only to the students and their parents but also to various other persons connected with

educational reforms. Interviews should also have been held with different categories of persons. It must be borne in mind that an objective assessment based on scientific and reliable data is absolutely essential. It is high time that educational organisations like the N.C.L.R.T. and S.I.E. conduct action research on the various issues concerning the worthwhileness and implementation of the new courses.

4. Vocational Courses side by side with Academic Courses. So far our experience has been that vocational courses provided in the institutions imparting General Education have not given the desired results. Perhaps, a second thought is needed on the issue whether it is not uneconomical to provide for vocational courses in the institutions meant for General Education. It is also to be experimented if by expanding facilities in the polytechnics and Vocational schools we can train personnel for the middle level occupations. For example if we glance through the vocational courses, we find teacher training as one of the courses. It is very doubtful if the products of the higher secondary schools in this area can compare with the teachers training colleges which specialise in this field and which have the requisite facilities.

5. Absence of any mention of terms like egalitarian. It is very much intriguing that the terms like Socialism, Secularism, Democracy and egalitarian do not find any place in the report under reference. Similar is the case with values like moral and spiritual training which are conspicuous by their absence.

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6. Undue Emphasis on the Principle of International Sharing. Perhaps there was no need to devote a paragraph to stress the importance of this principle.

7. Involvement of Students in Adult Literacy Programmes. It is very doubtful that the students can be effectively involved in running functional literacy programmes in the villages or urban slums of their neighbourhood.

8. Pedantic Thesis on Educational Reforms. From all accounts, the report reads like a pedantic thesis on educational reforms.

9. Composition of the Review Committee. Of the twenty seven members, thirteen belonged to Delhi and one may be tempted to remark that it is a 'Delhi Based Report'. Representatives of the private sector engaged in trade and industry were not associated with the working of this Committee. There were four representatives of the Public School System and none from the school catering for Academic or General Education. Similarly rural schools were not adequately represented. The committee was

almost a 'man's world'. There were only two female members against 25 males.

10. Too much Stress on Flexibility. It is felt that it is dangerous to go on harping on the 'flexibility' of the pattern of education, curriculum and the contents of the various courses. We must bear in mind that excess of everything is made. Flexibility must always be within limits. There is every possibility that flexibility may result in the emergence of the classical policy of 'Laissez-faire' which will be hardly conducive to national and emotional integration. Flexibility may mean anything and everything.

National Commissions on Teachers (1983—1985)

Appointment of the Commissions. Two National Commissions were set up by the Government of India in February, 1983. The National Commission on Teachers I, under the chairmanship of Prof. D.P. Chattopadhyaya, dealt with the issues relating to teachers at the school stage and the National Commission on Teachers II under the chairmanship of Prof. Rai Ahmed dealt with issues relating to teachers at the higher level. Shri Kireet Joshi, the then Educational Advisor was the Member Secretary of both the Commissions.

Submission of Reports. One of the important activities of both the Commissions was holding of a National Seminar in September, 1983 in which eminent educationists of India participated. Many regional seminars were also conducted. Important other techniques were questionnaires, interviews and interaction with educational experts, prominent educationists, etc. The Commissions submitted their Interim Reports to the Education Minister in June, 1984. Final reports were submitted to the Minister on 26th March, 1985.

MAIN RECOMMENDATIONS OF THE NATIONAL COMMISSION ON TEACHERS—I (SCHOOL STAGE)

1. Role of the Teacher in National Development. The primary task of the teacher is concerned with man-making, namely the making of the India of tomorrow.

The teachers should also work for the promotion of national goals, particularly Unity of India, Modernisation of India, Increasing Productivity and a Humane and Caring Society.

2. Welfare Measures. The following welfare measures should be initiated :

(a) Creation of a Housing Fund for teachers to facilitate easy and soft loans for house-building.

(b) Provision of holiday homes for teachers in major cities.

- (c) Promotion of house-building societies for teachers.
- (d) Provision of first-aid facilities in the school.
- (e) Provision of medical allowance at the rate of 7.5% of basic pay and reimbursement of the entire cost of treatment and medical expenses in maternity and serious illness.
- (f) Provision for the construction of one lakh quarters for women teachers in rural areas.

3. Running Salary Scales. The Central and State Governments should seriously explore the possibility of replacing the plethora of salary scales for teachers and educational administrators in each State by a single running scale.

The following running scale excludes all allowances :

Rs. 500—20—600—20—700—30—850—30—1000—40—1200
 40—1400—40—1600—50—1850—50—2100—50—2350—
 50—2600—60—2900—60—3200—75—3575—75—3950.

<i>Category</i>	<i>Pay at the Entry Point</i>	<i>Presumed Age of Entry</i>	<i>Retirement Age</i>	<i>Years of Service</i>	<i>Maximum Rs.</i>
1. Primary Tr.	500	25	60	35	1600
2. TGT/HM Pry.	700	25	60	35	2100
3. PGT/HM Middle/ Sub. Dy. Inspector	1000	25	60	35	2600
4. HM (Sec. Schs)	1200	30	60	30	2600
5. Dy. Inspector Schs	1200	30	60	30	2600
6. Head (Sr. Sec. Schs)	1600	35	60	25	2900
7. Inspector of Schs	1850	40	60	20	2900
8. Dy. Director of Edn.	2350	40	60	20	3575
9. Jt. Director of Edn.	2600	45	60	15	3575
10. Director of Edn.	3200	50	60	10	3950

4. Benefit to Teachers from New Scales of Pay. As a result of the new pay fixation policy, it is expected that on an average, each secondary school teacher in a State will get a benefit of not less than Rs. 100 per month while in the case of a primary teacher the benefit will not be less than Rs. 150 per month.

5. Efficiency Bar. There should be provision for an Efficiency Bar after 5 years from an entry point and every 10 years thereafter. This has been done to link salary to performance.

6. Subsidy to State Government. The Central Government should, if necessary, make good the deficit of a State Government during the first five years of the implementation of the composite running scale.

7. More Senior Positions in Schools. The number of senior positions in primary as well as secondary schools should be substantially increased by creating additional posts of Vice-Principal/first teacher. The number of posts at different levels should broadly conform to this distribution ; assistant teacher (60%), senior teacher (25%), Vice-Principal (10%) and Principal/Headmaster (5%).

8. Same Scale for various Categories of Teachers. There should be no discrimination in the matter of salary and other conditions of work against teachers of physical education, Indian languages, music, drawing, etc.

9. A Code of Conduct for Teachers. A code of conduct for teachers should be formulated at the national level in consultation with teachers organisations.

10. Four Year Integrated Training Course. There should be a four year training course after secondary, or preferably a 5 year course leading to graduation and training. Each State may make a beginning during the seventh Plan by starting at least one such integrated college of education. The integrated four year curriculum for a degree in education should consists of two elements. general education and professional preparation.

General Education course should include :

- (1) Study of Languages ;
- (2) Four disciplines from among the subjects taught at school; and
- (3) Seminars, projects and study visits.

The Professional Course should consist of :

- (a) Study of education as a discipline including educational psychology, sociology of education, and educational philosophy.
- (b) Practice of teaching and its content-cum-methodology; and
- (c) Learning a variety of skills related to the role of a teacher including education technology and preparation of software.

11. Extension of one year B.Ed. Course. The duration of one year B.Ed. Course should be extended by two summer months ensuring an academic session of 220 days with longer working hours.

12. Two Year Training Course for Elementary Teachers. For elementary teachers it is desirable to have a two year training course after class XII.

13. Recruitment First and Training Afterwards. The approach to recruit an untrained first class graduate/post-graduate and then to give him on the job training to be followed by full training through correspondence and contact programme, could also be tried out.

14. Internship in place of Practice Teaching. Apart from teaching methods, the pupil teacher should also gain experience of his other roles such as organisation of co-curricular activities and working with the community. The word 'Practice Teaching' should be replaced by the word 'Internship' as it suggests a much more comprehensive concept of teacher training. During this period, stress should be laid, along other things, on blackboard writing, drawing skills, making and improving aids to learning and using technological equipment.

15. Right Tools for Evaluation of Pupil-Teacher Performance. The faculty must evolve the right tools for evaluation of pupil-teacher performance in the class and also take into account such factors as aptitude to work, love for children, scientific outlook, etc. Self-assessment and pre-lesson and post-lesson discussion should be encouraged.

16. Selection of Teachers for Training. While selecting a teacher for training, the following factors may be taken into consideration :—

- (a) Good physique ;
- (b) Linguistic ability and communication skills;
- (c) A fair degree of general mental ability ;
- (d) General awareness of the world;
- (e) A positive outlook on life ; and
- (f) Capacity of good human relations.

Selection of trainees should be made through a combination of objective tests, rating scales, group discussion and personnel interviews.

17. Teacher Educators. The minimum qualification for a teacher educator should be a postgraduate degree in the subject and B.Ed. preferably an M.Ed. Degree. The teacher educators should be proficient in the use of skills they seek to develop among their trainees. In particular they should be proficient in the service and maintenance of educational technology and must be knowledgeable about the available source for software.

National Policy on Education—1986

Background. Since the adoption of the 1968 policy, there has been considerable expansion in educational facilities all over the country at all levels. The most notable development has been the acceptance of a common structure of education throughout the country and the introduction of the 10+2+3 system by most States. In the school curricula in addition to laying down a common scheme of studies for boys and girls, science and mathematics were incorporated as compulsory subjects and work experience assigned a place of importance.

A beginning has also been made in restructuring of courses at the under-graduate level. Centres of Advanced Studies have been set up for postgraduate education and research.

While these achievements are impressive by themselves the general formulations incorporated in the 1968 Policy did not, however, get translated into a detailed strategy of implementation, accompanied by the assignment of specific responsibilities and financial and organisational support. As a result, problems of access, quality, quantity, utility and financial outlay, accumulated over the years, assumed such massive proportions that it required an urgent action.

The National Policy on Education 1968 had stipulated that the Government of India would also review every five years the progress made and recommend guidelines for future development. However, no such review was ever undertaken during 1968 and 1985.

A review of the progress and limitations of the system of education was necessitated by the keen interest shown by Prime Minister Rajiv Gandhi. In his broadcast to the nation on January 5, 1985, Rajiv Gandhi promised a new education policy that would equip the country both scientifically and economically to enter the 21st century. He observed, "Education must promote national cohesion and the work ethic. The grandeur of our freedom strug-

gle and its significance for national integration have to be brought home to every student. Our schools and colleges should acquaint the younger generations with India's ancient heritage and culture. The curricula and text books should curb parochial and communal interpretations of our composite culture.

I strongly emphasise education's organic link with the productive forces of society. We shall reorganise vocational education to align it with industry, agriculture, communication and other productive sectors of our economy".

Challenge of Education—A Policy Perspective. The Ministry of Education, Government of India, prepared the above mentioned document and placed it in the Parliament on August 20, 1985. The document contained an overview of the state of education. It also pointed out the inadequacies of the system. The document pointed out the direction of future initiatives. There was a nation-wide debate on the various points contained in the document. Educational administrators, planners, supervisors, teachers, students, parents, intellectuals and citizens interested in education participated in the debate at various levels.

Emergence of the National Policy on Education, 1986. The Ministry of Education, now known as Ministry of Human Resource Development, Government of India, brought out a revised document entitled 'National Policy on Education, 1986—A Presentation'. This was discussed in the meetings of the State Ministers of Education, the National Development Council and the Central Advisory Board of Education. In the light of these discussions, it became necessary to incorporate changes in this document. Accordingly the 'Draft National Policy on Education, 1986' was presented to the Parliament in the first week of May, 1986. The Draft was debated and finally adopted by the Lok Sabha on May 8, 1986 and Rajya Sabha on May 12, 1986. In this way the 'National Policy on Education' was formulated.

CONTENTS OF THE NATIONAL POLICY ON EDUCATION

The National Policy contains XII Parts and 157 Paragraphs as given below :

<i>Part</i>	<i>Subjects</i>	<i>No. of Paragraphs</i>
I.	Introductory	15
II.	The Essence and Role of Education	4
III.	National System of Education	13
IV.	Education for Equality	13
V.	Reorganisation of Education at Different Stages Early childhood—Elementary Education— School Facilities—Secondary Education—Pace	42

setting schools—Vocationalisation—Higher Education—Open University and Distance Learning—Delinking Degrees from Jobs—Rural University	
VI. Technical and Management Education.	20
Institutional thrusts—Innovation, Research and Development—Promoting Efficiency and Effectiveness at All Levels—Management Functions and Change	
VII. Making the System Work	3
VIII. Reorienting the Content and Process of Education.	25
The Cultural Perspective—Value Education—Languages—Books and Libraries—Media and Educational Technology—Work Experience—Education and Environment—Mathematics Teaching—Science Education—Sports and Physical Education—The Role of the Youth—Evaluation Process and Examination Reform	
IX. The Teacher	6
X. The Management of Education.	9
National Level—Indian Education Service—State Level—District and Local Level—Voluntary Agencies and Aided Institutions	
XI. Resources and Review	5
XII. The Future	2

SALIENT FEATURES OF THE NATIONAL POLICY

I. Education—Fundamental to Development. In our national perception education is essentially for all. This is fundamental to our all round development, national and spiritual.

II. Education as Investment. Education is unique investment in the present and the future. It develops manpower for different levels of economy.

III. Education—A Meaningful Partnership. The Constitutional Amendment of 1976 which includes education in the concurrent list, was a far reaching step whose implications—substantive, financial and administrative—require a new sharing of responsibility between the Union Government and the States in respect of this vital area of national life.

IV. Education for Equality. The new Policy lays special emphasis on the removal of disparities and to equalise educational opportunity by attending to the specific needs of those who have been denied equality so far.

V. Promotion of Adult Education. The whole nation must pledge itself to the eradication of illiteracy, particularly in the age-group 15–35.

VI. Early Childhood Education and Care. Programmes of Early Childhood Education and Care (ECCE) will be child-oriented, focussed around play and the individuality of the child.

VII. Elementary Education. The new thrust in elementary education will emphasise two aspects :

(i) Universal enrolment and universal retention of children up to 14 years of age.

(ii) A substantial improvement in the quality of education.

VIII. Provision of School Facilities —Operation Blackboard. A phased drive, symbolically called OPERATION BLACKBOARD will be undertaken with immediate effect to improve Primary Schools all over the country.

IX. Non-formal Education. A large and systematic programme of non-formal education will be launched for school drops, for children from habitations without schools, working children and girls who cannot attend whole day schools.

X. Secondary Education—Pace-setting schools. Pace-setting schools will be established in various parts of the country to provide opportunities to the children with special talent or aptitude to proceed at a faster pace by making good quality education available to them, irrespective of their capacity to pay for it.

XI. Vocationalisation of Education. Vocational education will be a distinct stream intended to prepare students for identified occupations spanning several areas of activity.

XII. Higher Education. The main emphasis will be on the consolidation and expansion of facilities in the existing institutions.

XIII. Autonomy and Freedom. Autonomy and freedom will be accompanied by accountability.

XIV. Open University and Distance Learning. This powerful instrument will be developed with care and extended with caution.

XV. Rural University. Institutions and programmes of Gandhian basic education will be supported.

XVI. Technical and Management Education. The re-organisation of technical and management education will take into account the anticipated scenario by the turn of the century with specific reference to the likely changes in the economy, social environment, production and management processes, the rapid expansion of knowledge and the great advances in science and technology.

XX. Improvement in the Evaluation Process and Examination Reform. The examination system will be recast so as to ensure a method of assessment that is a valid and reliable measure of student development and a powerful instrument for improving teaching and learning.

XXI. Status of the Teacher. The Government and the community should endeavour to create conditions which will help motivate and inspire teachers on constructive and creative lines.

XXII. Indian Education Service. A proper management structure in education will entail the establishment of the Indian Education Service as an All India Service.

XXIII. Resources. Investment on education will be gradually increased to reach a level of expenditure of 6 per cent of the national income as early as possible. The policy lists down the following sources of educational finance :

(i) Mobilisation of donations.

(ii) Asking the beneficiary communities to maintain school buildings and supplies of some consumables.

(iii) Raising fees at the higher levels of education

(iv) Effecting some savings by the efficient use of facilities.

(v) Asking the institutions involved with research and the development of the technical and scientific manpower to mobilise some funds by levying a cess or charge on the user agencies including Government departments and entrepreneurs.

XXIV. Review. Implementation of the various parameters of the New Policy will be reviewed every five years.

XXV. Delinking Degrees from Jobs. Delinking degrees from jobs will be applied in services for which a university degree need not be a necessary qualification.

XXVI. Making the System Work. It will be ensured that all teachers teach and all students study. Better facilities will be provided to teachers as well students. A system of performance appraisal of institutions will be created.

MISSING LINKS IN THE NEW POLICY

Financial implications of the implementation of educational reforms have not been worked out. It may be pointed out that any workable document must be backed by financial resources, otherwise it will remain a 'paper' document. Mr. Manmohan Singh in an article entitled "Education : A Developmental View" in the 'Hindustan Times' dated March 22, 1986 rightly observed, "So much has been said, suggested and recommended that when it comes to implementation, the budgetary constraints make a mincemeat of our educational aspirations... We have to be perhaps ruthlessly realistic about our economic and budgetary constraints. There is no point in trying to apply one cubic inch of butter to a square mile of bread. "Such an attempt would imply a realignment of priorities in educational investment."

THE FUTURE

It has been envisaged that notwithstanding the complexity of the future shape, given our tradition which has almost always put a high premium on intellectual and spiritual attainment, we are bound to succeed in achieving our objectives.

NATIONAL SYSTEM OF EDUCATION

The concept of a National System of Education implies that up to a given level, all students, irrespective of caste, creed, location or sex, have access to education of a comparable quality. The National System of Education should have the following features :

1. Common School System. Effective measures will be taken in the direction of the Common School System recommended in the 1968 Policy.

2. Common Educational Structure. The National System of Education envisages a common educational structure.

3. National Curricular Frame work. The National System of Education will be based on a national curricular framework which contains a common core along with other components that are flexible. The common core will include the history of India's freedom movement, the constitutional obligations and other contents essential to nurture national identity. These elements will cut across subject areas and will be designed to promote values such as India's common cultural heritage, egalitarianism, democracy and secularism, equality of the sexes, protection of the environment, removal of social barriers, observance of the small family norms and inculcation of the scientific temper.

4. Education for Equality. Special emphasis will be laid on the removal of disparities and to equalise educational opportunities by attending to the specific needs of the women, Scheduled Castes and Tribes, the Minorities and the handicapped.

To promote equality, it will be necessary to provide for equal opportunity to all not only in access but also in the conditions of success.

5. Education for National and Emotional Understanding. Steps will be taken to foster among students an understanding of the diverse cultural and social systems of the people living in different parts of the country.

6. Promotion of National Pride. The young will be encouraged to undertake the rediscovery of India, each in his own image and perception.

7. Language Policy. The Language Policy of 1968 will be implemented more energetically and purposefully.

8. Promotion of Link and other Languages. Besides the promotion of the link language, programmes will also be launched to increase substantially the translation of books from one language to another and to publish multilingual dictionaries and glossaries.

9. Value Education. Value education will be based on our heritage, national goals and universal perceptions. It will be designed to help eliminate obscurantism, religious fanaticism, violence, superstition and fatalism.

10. Cultural Content in the Curricula. The curricula and processes of education will be enriched by cultural content in as many manifestations as possible. The existing schism between the formal system of education and the country's rich and varied cultural traditions will be bridged. The preoccupation with modern technologies will not be allowed to sever our new generations from the roots in India's history and culture. Deculturation, dehumanisation and alienation must be avoided at all costs. Education can and must bring about the fine synthesis between change-oriented technologies and the country's continuity of cultural tradition.

11. Work Experience. Work experience viewed as purposeful and meaningful manual work, organised as an integral part of the learning process and resulting in either goods or services useful to the community, is considered as an essential component at all stages of education, to be provided through well structured and graded programmes.

12. Education and Environment. There is a paramount need to create a consciousness of the environment. It must permeate all ages and all sections of society, beginning with the child.

Programme of Action For Educational Reforms

INTRODUCTION

The Parliament discussed and adopted the National Policy On Education, 1986 in its Budget Session held in May, 1986. Immediately after the Budget Session, the Ministry of Human Resource & Development, Government of India constituted 23 Task Forces to prepare Programme of Action for the Implementation of the National Policy. Eminent educationists, experts and senior representatives of Central and State Governments were associated with these Task Forces. The Programme of Action provides an indication of the nature of action needed in order to implement the directions of the policy. It provides a broad strategy for drawing up detailed schemes.

EARY CHILDHOOD CARE AND EDUCATION (ECCE) (Pre-primary or Nursery Education)

National Policy on ECCE. The focus is not merely on preprimary or nursery education in the New Policy. It has given a good deal of importance to ECCE. It views ECCE as an important input in the strategy of human resource development, as a feeder and support programme for primary education and a support service for working women of the disadvantaged sections of the society. It has also taken into account the holistic nature of ECCE and has pointed out the need for organising programmes for the all round development of the child. The significance of play and activity approach and the need for child centredness in the programme of ECCE as well as primary school education have been spelt out. It has cautioned against the danger of using formal methods of teaching and early introduction of the 3' R's. The involvement of the community has been highlighted.

Targets for the Promotion of ECCE. The ECCE involves the total development of the child, i.e., physical, motor, cognitive, language, emotional, social and moral. The age under consideration in ECCE is from conception to about 6 years. It is proposed

to cover 70 per cent of the group by all services by 2000 A.D. A minimum of 2.50 lakh centres should be established by 1990, 10 lakh centres by 1995 and 20 lakh centres by 2000. At present only about 10 percent of the age group is covered.

SUGGESTIONS FOR THE PROMOTION OF ECCE

1. Each anganwadi workers' training centre should be given the responsibility of running at least 25 anganwadi centres.
2. The trainees should be placed for a minimum of one month in the anganwadis for practical training.
3. Instructional materials for the use of trainers and the trainees should be developed.
4. Materials for children—picture books, pictures, posters, minimum essential play materials should be made available to all anganwadis.
5. The trainers, supervisors and other officers should be oriented through refresher courses in pre-school education components.
6. A beginning should be made in Integrated Child Development Services (ICDS) by developing a small percentage of anganwadis as Day Care Centres.
7. Balwadis run by Voluntary Agencies should have all the components of health, nutrition and education.
8. Pre-primary schools run by the State Governments and Municipalities should take the following steps :
 - (i) Add components of health and nutrition.
 - (ii) Discourage the early introduction of the three R's.
 - (iii) Use play-way methods.
 - (iv) Develop a relationship between home and community.
9. The creches and day care centres should be strengthened immediately. The following requirements should be ensured ;
 - (i) Timing co-terminus with school working hours or mothers' working hours.
 - (ii) Adequate, safe and hygienic space.
 - (iii) Adequate child worker ratio.
 - (iv) Adequate supplementary nutrition.
 - (v) Adequate para medical care.
 - (vi) Sufficient toys and playmaterial.
 - (vii) Sufficient drinking water.
10. There should be a further emphasis on experimentation for evolving low cost child care models..
11. The component of training in all ECCE programmes should be strengthened.
12. A two year vocational course in ECCE at +2 level with the objective to create basic skills should be developed.

13. Media support is essential for conveying to the parents and community, the Messages of ECCE.

14. Concentrated efforts should be made by all concerned organisations such as Doordarshan, All India Radio, National Council of Educational Research and Training and National Institute of Public Cooperation and Child Development and other related organisations in developing software in all major regional languages.

15. A Management Information System will be evolved for monitoring all ECCE programmes.

16. All types of programmes will be got evaluated by independent agencies once in five years.

ELEMENTARY EDUCATION

The Present Position and Problems of Elementary Education. Provision of free and compulsory education to all the children until they complete the age of 14 years is a Directive Principle of the Constitution. In spite of determined efforts made in this direction since independence we are still far away the achievement of the goal. At present approximately 95 per cent children in 6-11 age-group and 50 per cent children in age group 11-14 are enrolled in schools. The corresponding figure for girls is 77 per cent and 36 per cent respectively.

Between 1950-51 and 1984-85 the number of primary schools increased from approximately 2,10,000 to approximately 5,20,000 and the number of upper primary schools (middle schools) from 30,600 to 1,30,000.

In urban areas there is overcrowding in schools and the conditions of buildings, furniture facilities and equipment is unsatisfactory in almost all parts of the country.

40% primary schools have no pucca buildings. 39.72% primary schools are without blackboards.

59.50% primary schools have no drinking water facilities.

35% primary schools have a single teacher to teach 3 or 4 different classes.

Of 100 enrolled children in class I only 23 reach class VIII. Drop out rate is very high.

About 75% of the out of school children are in nine States. Andhra, Assam, Bihar, Jammu & Kashmir, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal.

Targets for Elementary Education. The New Policy on Education envisages that the new thrust in elementary education will emphasise two aspects :

MEASURES PROPOSED FOR THE QUANTITATIVE AND QUALITATIVE IMPROVEMENT OF ELEMENTARY EDUCATION

1. **Removal of Disparities.** Special measures will be taken to ensure that whatever the socio-economic background of the children, they get opportunities to achieve success of a level which approximates to the level of children from comparatively better-off sections of society.

2. **Common School System.** Efforts will be made to move in the direction of the common school system for providing some opportunities to the students belonging to the rich as well as the poor sections of the society.

3. **Involvement of the community.** A great stress will be laid to create an upsurge involvement of all the people concerned. The political parties, particularly their local constructive workers, will have to play an important role in this regard.

For all practical purpose, the primary schools and non-formal education centres will be accountable to the local community.

All agencies and institutions who have earned the confidence of the community and who can make a positive contribution to Universalisation of Elementary Education (UEE) will be involved. These would include youth clubs, mahila mandals, social activist groups, local development workers, retired teachers, ex-servicemen, etc.

4. **Involvement of Teachers.** Involvement of teachers at all stages of planning and implementation will be ensured. This will take the form of systematic consultation with their unions and associations.

5. **Residential and Ashram Schools.** For children belonging to SC/ST and other deprived sections, residential schools and hostels will be provided on much larger scale. The programme of Ashram Schools will also be improved and enlarged. Efforts will be made towards creation of an inexpensive system of hostels, using the school building and providing a kitchen room, where local villages would be engaged on part-time basis to assist with cooking and supervision. Possibility of providing free foodgrains to the students in those hostels out of the accumulated stocks in the country will be explored.

6. **Enrolment and Retention.** Enrolment drives will be replaced by systematic house to house survey in which the teachers, in cooperation with the village community, will discuss with the parents the relevance of schooling and regularity of attendance.

7. Non-Formal Education. Children for whom it is not possible to participate in whole day schools, will be enrolled in the non-formal education centres.

8. Child-centred Education. Elementary education will be made child-centred. The most important aspect of this reform will be to make education a joyful, inventive and satisfying learning activity, rather a system of rote and cheerless, authoritarian instruction.

9. Manual Work as an Educational Activity. While manual work by children is not to be shunned, it should be an educational activity rather than an irksome work.

10. No Corporal Punishment. Though practically all States in India have already banned corporal punishment, but it is still widely prevalent. This must be stopped forthwith.

11. Holidays according to Local Situation. Each District Board of Education will have the power to determine the days of vacation and they would be asked to relate them to agricultural seasons, ensuring at the same time that the number of instructional days does not fall below 220.

12. Policy of Non-Detention. The non-detention policy will be effectively implemented upto class VIII while also ensuring that the minimum learning competencies are reached.

13. Comprehensive System of Incentives and Support Services. The following items have special relevance for children of the economically weaker sections of society.

(a) Establishment of day care centres for pre-school children and infants

(b) Provision to the girls of all families below the poverty line, two sets of free uniforms, free text books, stationery and attendance incentives.

(c) Free transportation in State Roadways buses to children attending elementary schools.

14. Rewards and Recognition. A comprehensive system of rewards and recognitions will be created for individuals and institutions who contribute in a significant manner retention of children in primary schools or non-formal education centres.

15. Compulsory Education Legislation. Those States which have not enacted such law would be advised to do so and the existing laws in this behalf will be reviewed.

16. Use of Technology in Non-Formal Education. Modern technological tools - such as solar packs for provision of power, audio-visual aids, radio-cassette player will be used to improve the learning environment of Non-Formal Education Centres.

17. Learning Material of High Quality. Learning material of high quality will be developed so as to make learning inspirational and effective.

18. Different Models. Efforts will be made to evolve different models of non-formal education programmes and agencies involved in the implementation of the programme will be encouraged to evolve and adopt the most suitable model depending upon the requirement of target group.

19. Training of Non-Formal Education Personnel. Training of non-formal education personnel is the key to the success of the Programme. Initial training and recruitment training are both crucial.

20. Supervision and Administration. This should be adequately strengthened.

21. Operation Blackboard (O.B.). The purpose of OB is to ensure provision of minimum essential facilities in primary schools—material facilities as well as learning equipment. Use of the word 'Operation' implies that there is an urgency in this programme, that goals are clear and well-defined and that Government and the people are determined to achieve those goals within a predetermined time frame.

OB envisages :

- (i) Two reasonably large rooms that are usable in all weather ;
- (ii) Necessary toys and games material ;
- (iii) Black boards ;
- (iv) Maps ;
- (v) Charts ; and
- (vi) Other Learning materials.

22. Construction of Buildings for Primary Schools. The following points need to be mentioned :

(1) Construction of essential buildings for primary schools will be the first charge on NREP (National Rural Employment Programme) and RLEGP (Rural Landless Employment Guarantee Programme) funds. These resources will be supplemented by other appropriate schemes.

(2) Village Education Committees will be required to give undertaking for maintenance and upkeep of buildings and other structures.

(3) Primary school-wise inventories of available structures will be prepared for systematic planning.

(4) Inexpensive building designs will be prepared keeping in view the agro climatic conditions and utilising locally available materials.

23. Review of Progress of UEE. The State Advisory Boards of Education and CABE should set up separate committees to review the progress. For this purpose they may be assisted by NIEPA, NCERT, SCERT and other suitable national and state level agencies of education.

SECONDARY EDUCATION

National Policy on Secondary Education. The policy relating to secondary education implies extension of the school system in the unserved areas, consolidating the existing facilities and providing special arrangements for the gifted children and the high achiever.

Programme of Action. Open schools would be established in a phased manner by 1990 with a resource centre in each district.

As a medium and long term measure a programme of school mapping in each State for locating schools to cover all areas will be taken up. Special emphasis will be laid on backward areas, areas predominantly inhabited by SC/ST and schooling facilities for girls.

School clusters will be established with secondary schools as its lead school and upper primary schools in the catchment area.

Adequate playground facilities where needed will be provided by making available nearby vacant land and in other places by arranging for sharing of such facility with neighbouring school as a priority programme during the Seventh Plan.

For providing adequate laboratories and other facilities it is suggested that community participation by way of student contribution at the rate of Rs. 10 to 15 per month should be levied, except from girls and others exempt from payment of tuition fee. This collection should remain in the school for replacement and maintenance purpose.

The ratio of higher secondary and secondary schools should be 1 : 3.

As an important programme in the process of consolidation, schools should be helped to have all the three streams and a vocational stream in selected schools.

The curricula and processes of education should be enriched by cultural content. Children will be enabled to develop sensitivity to beauty, harmony and refinement.

Steps should be taken to bring about the fine synthesis between change-oriented technologies and the country's continuity of cultural tradition.

Linkages will have to be established between the university system and institutions of higher learning in art, archaeology, oriental studies, etc.

Steps must be taken to make education a forceful tool for the cultivation of social and moral values. Such value education should help eliminate obscurantism, religious fanaticism, violence, superstition and fatalism.

Measures will be taken to implement the three language formula energetically and purposefully.

Environmental consciousness must be integrated in the entire educational process.

Mathematics should be visualised as the vehicle to train a child to think, reason, analyse and to articulate logically with educational computing and the emergence of learning through the cause-effect relationships and the interplay of variables. The teaching of mathematics will be suitably redesigned to bring it in line with modern technological devices.

Every effort should be made to design science education programmes to enable the learner to acquire problem solving and decision making skills and to discover the relationship of science with health, agriculture, industry and other aspects of daily life.

A nation-wide infrastructure for physical education, sports and games consisting of play-fields equipment, coaches and teachers of physical education should be built into the educational edifice.

Evaluation system must be reformed so as to ensure a method of assessment that is a valid and reliable measure of student development and a powerful instrument for improving teaching and learning.

The most important contemplated educational reform would be the articulation of a national system of education with a common structure, national curricular framework containing a common core :

The common core curriculum will consist of the following ten areas.

- (i) History of India's Freedom Movement.
- (ii) Constitutional Obligations.
- (iii) Content Essential to Nurture National Identity.
- (iv) India's Common Cultural Heritage.
- (v) Egalitarianism, Democracy and Secularism.
- (vi) Equality of Sexes.
- (vii) Protection of the Environment.
- (viii) Removal of Social Barriers.
- (ix) Observance of Small Family Norms.
- (x) Inculcation of the Scientific Temper.

PACE SETTING OR NAVODAYA VIDYALAYAS

It is universally accepted that children with special talent or aptitude should be provided opportunities to proceed at a faster pace, by making good quality education available to them, irrespective of their capacity to pay for it. The National Policy on Education suggested the scheme of Navodaya Vidyalayas for catering to the category of high achievers. Accordingly efforts are being made to set up one such vidyalaya in each district during the Seventh Five Year Plan period.

Important characteristics of these schools will be as under :

1. These schools will make available good quality education irrespective of the parent's capacity to pay and their socio-economic background.
2. There will be 75 per cent reservation for children from rural areas in these schools.
3. There will be reservation for SC and ST as per their actual population in the district subject to a minimum of nationally prescribed figure of 15 and 7½ per cent for SC and ST respectively.
4. Efforts will be made to cover girls to the extent of $\frac{1}{3}$ in a school.
5. Education will be free including boarding and lodging in these schools.
6. These schools will have opportunities for innovation and experimentation.
7. These schools will promote national integration by providing opportunities to talented children largely rural, from different parts of the country to live and learn together, to develop their full potential, and most importantly to become catalysts of a nationwide programme of school improvement.
8. These schools will be affiliated to the Central Board of Secondary Education.
9. These schools will be run by the Central Government.
10. These schools will be run by a Centrally sponsored Agency.
11. Students will be selected on the basis of a special admission test prepared by NCERT.
12. The number of students admitted will be limited so that the pupil-teacher ratio is low.

VOCATIONALISATION OF EDUCATION

Importance of Vocationalisation. The National Policy on Education, 1986 has observed, "The introduction of systematic,

well planned and vigorously implemented programme of vocational education is crucial in the proposed educational reorganisation. These elements are meant to enhance individual employability, to reduce the mis-match between the demand and supply of skilled manpower and to provide an alternative for those pursuing higher education without particular interest or purpose."

Present position. The programme of vocationalisation of higher secondary education was initiated in 1976. Since then it has been implemented in 10 States and 5 Union Territories'. However in spite of great emphasis on it and vigorous efforts, the scheme of vocationalisation has not yet picked up. The current intake in the vocational stream is of the order of 72,000. Only about 2.6% of student population entering higher secondary stage is covered by vocationalisation so far.

Factors Responsible for Slow Progress. It has been analysed by experts that following are the main factors responsible for slow progress in this direction :

- (1) Absence of a well coordinated management system.
- (2) Unemployability of vocational pass-outs.
- (3) Mis-match between demand and supply.
- (4) Reluctance in accepting the concept by the society.
- (5) Absence of proper provisions for professional growth and career advancement of the vocational pass-outs, etc.
- (6) Absence of proper facilities for vocationalisation in educational institutions.

Targets for Vocationalisation. It has been proposed that vocational courses cover 10 per cent of higher secondary students by 1990 and 25 per cent by 1995.

Programme of Action and Suggestions for the Promotion of Vocationalisation of Education. Renewed efforts are needed to accelerate progress. Urgent steps to strengthen the vocational education system are imperative. Following are the important suggestions for carrying out effectively the programme of vocationalisation of education :

1. Vocational education should be accepted as a distinct stream intended to prepare students for identified occupations spanning several areas of activity.
2. Health planning and health service management should optimally interlock with the education and training of appropriate categories of health manpower through health related vocational courses at the +2 stage of higher secondary education.
3. Efforts should be made to devise similar vocational courses based on Agriculture, Marketing, Social services, etc.

4. The current prejudice against vocational education will not disappear unless a reasonable chance of worthwhile employment or an advantage in moving upwards into a professional or general programme of education is provided to the students of vocational courses at the secondary level.

5. Vocational students of the +2 stage should be brought under the umbrella of apprentice scheme as an important catalyst for the promotion of vocational education.

6. The vocational courses should cater to the requirement of the organised as well as unorganised sectors of the economy.

7. Vocational courses at the +2 stage should prepare students for self-employment.

8. Special steps to cater to the needs of women, rural and urban tribal students and deprived sections of the society should be taken.

9. Appropriate vocational programmes should be started for the handicapped and disabled persons.

10. Tertiary level courses should be organised for the young who graduate from the higher secondary courses of the academic stream and may also require vocational courses.

11. Graduates of vocational courses should be given opportunities, under predetermined conditions for professional growth, career improvement and lateral entry into courses of general, technical and professional education through appropriate bridge courses.

12. Non-formal, flexible and need based vocational programmes should be made available to neo-literates, youth who have completed primary education, school drop-outs, persons engaged in work and unemployed or partially employed persons.

13. It would be desirable to involve institutions of higher education in the vicinity of the target schools in the promotion and implementation of the vocational programme.

14. It is necessary to recognise that there is a minimum level of funding below which a meaningful programme of vocationalisation cannot be implemented.

15. The existing set up for administration, research and development support and certification of the vocational programmes will have to be suitably strengthened in order to make it functionally adequate to cope with the dimensions of the task.

16. A Joint Council for Vocational Education (JCVE) should be set up by the Ministry of Human Resource Development (MHRD) to be the apex body for policy planning and coordination of vocational education at national level.

17. Organisations like NCERT, CIVE, Regional Colleges of Education (RCEs), SCERTs, SIVE, Technical Teachers Training Institutions (TTIs), etc. should be strengthened to perform their functions effectively for the development of vocationalisation.

18. Through area vocational surveys, assessment of vocational manpower may be made.

19. Model vocational curricula and guidelines should be developed by NCERT in collaboration with such organisations at the state level and national level also.

20. NCERT and other organisations should evolve an information system for vocational education to ensure constant communication between the Central and State Governments, nodal agencies, directorates, district level authorities and the institutions along with participating employer organisations.

21. Entrepreneurial and self-employment skills will be developed in vocational stream students, through curriculum, special training programmes as well as paid apprenticeship facilities.

22. Career Guidance Cells should be established at various levels.

23. Public and private sector industry should be involved in vocational education through appropriate incentives and rewards.

24. A phased and coordinated programme for the training of teachers, principals and key officials in the vocational education system using the available infrastructures in organisations like NCERT, RCE, SIVE, TTIs, SCERT's, etc. should be organised.

25. NCERT and other organisations should evolve and implement a phased programme for the development of text books and other instructional material on a large scale to meet the diverse needs of a variety of vocational programmes.

26. Steps should be taken to change recruitment rules for selection to Government Departments at Central and State levels and Public Sector in order to give due weightage to vocational stream graduates in posts appropriate to their vocations.

27. Duplication of efforts should be avoided.

ADULT EDUCATION

The Present Position. Spread of literacy has been an important programme since independence. Between 1951 and 1981, the percentage of literacy improved from 16.67 per cent to 36.27 per cent. However, in absolute numbers illiterate persons have increased during this period from 300 million to 437 million. Women comprise 57 per cent of the illiterate population and the situation among SC/ST is particularly bad.

The New Policy and Targets. The National Policy on Education envisages that adult education should be a means for reducing economic, social and gender disparities. The principal aim of the National Programme of Adult Education (NPAE) is to provide education including literacy to the population in 15-35 age-group, which numbers about 100 million. It would be a phased time-bound programme, covering approximately 40 million by 1990 and another 60 million by 1995.

Two Important Aspects of the Programme. The National Adult Education Programme, interalia, will lay emphasis on (i) Skill development, and (ii) creation of awareness among the learners of the national goals, of development programmes, and for liberation from oppression.

Major Drawbacks of the Past Programmes. The past programmes have suffered due to excessive dependence on administrative structures and lack of involvement of the mass organisations, media and education institutions.

Reorganisation of the Adult Education Programmes. Previous experience has brought out that science, technology and modern research must be applied to adult education programmes to make them meaningful by giving practical information and developing skills relevant to day-to-day needs of learners. The following measures are suggested to accelerate programmes of adult education :

1. The involvement of voluntary agencies and social activist groups should be obtained by creating a relationship of partnership, and simplifying procedures.
2. Active participation of the Shramik Vidyapeeths, mass organisation of workers, peasants, women, youth and students should be sought.
3. Employers should be required if necessary by law, to organise literacy and skill development programmes for all their employees.
4. Functional Literacy of Women (FLOW) should be an integral part of ICDS (Integrated Child Development Services).
5. Literacy work should be taken up by a large number of students as 'Social Service' or 'Study Service' as a part of work experience and social national service which may be reflected in the students' final result sheets.
6. Substantial incentive should be provided to secondary/senior secondary schools, colleges and universities on institutional basis.
7. Individuals may be encouraged to look upon literacy work as a personnel commitment and voluntary service.

8. Mass media and technology—radio and T.V. and films may be made use of in adult education programmes.

9. Greatest attention should be paid to the preparation of good learning materials and teachers' guide. Latest technologies of printing and communication shold be employed.

10. Efforts should be made to improve the physical environment, power supply and the illumination, etc. of the Adult Education Centres.

11. Suitable arrangements should be made for the supply of topical and relevant learning materials.

12. The process of learning should be enriched by developing cheaper and sturdier audio-visual material.

13. A cluster of 8 to 10 Adult Education Centres should be overseen by a supervisor who should be selected from the local area.

14. The day to day financial and administrative powers necessary for implementation of the programmes should be decentralised.

15. A Management Information System should be instituted to ensure periodic flow of information needed for improvement.

16. Adequate attention should be paid to the education of the learner—the purpose being to ensure that adult learners attain level in literacy and numeracy which would enable them to continue learning in a self-reliant manner. Learner evaluation is also concerned with skill development, awareness, etc.